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Salmonella Serotype Enteritidis Infections Among Workers Producing Poultry Vaccine — Maine, November–December 2006

On November 15, 2006, the Maine Department of Health and Human Services (MDHHS) was notified of a case of salmonellosis (a nationally notifiable disease) in an employee of a facility that produced poultry vaccine. When a second case of salmonellosis in another employee at the same facility was reported on November 25, MDHHS began an outbreak investigation. Results of that investigation suggested that 21 employees of the facility became ill during a 1-month period from exposure to a strain of *Salmonella* serotype Enteritidis (SE) that was used in vaccine production. Infection was thought to have resulted from environmental contamination after the spill of a liquid containing a high concentration of SE. As a result, MDHHS recommended that the facility improve its infection-control procedures to better protect workers. This outbreak highlights occupational risks that can be associated with the manufacture of veterinary biologics involving human pathogens.

The vaccine-production facility is located in a town of approximately 8,000 persons in central Maine, has 74 employees, and manufactures viral and bacterial vaccines for poultry. The facility had been last inspected in August 2005 by staff members of the U.S. Department of Agriculture's (USDA's) Center for Veterinary Biologics, which regulates animal vaccine-production facilities. The facility maintains stock cultures of four phage types of SE (8, 14B, 23, and 24) for vaccine production.

On November 9, 2006, a spill of approximately 1–1.5 liters of liquid occurred in the fermentation room of the production area of the facility; the liquid contained 2×10^{10} to 5×10^{10} colony forming units per milliliter of SE phage type 8. The room was unoccupied at the time the spill occurred. The one worker who was regularly assigned to this room reported finding liquid overflowing onto the

floor from the fermentation apparatus when he entered the room, wearing personal protective equipment (PPE) (e.g., biohazard suit, hat, booties, mask, and gloves). He cleaned up the spill using a mop, a 5% bleach solution, and a commercial disinfectant effective against SE. The mop was autoclaved before disposal in a room 30 feet away (room A) used for cleaning and sterilizing laboratory supplies and equipment for vaccine production. The facility did not have a written spill procedure or a spill clean-up kit. On November 15, the worker who cleaned up the spill had diarrhea of 1 day's duration. He did not miss work, seek medical care, or submit a stool specimen for culture.

On December 13, a total of 67 (91%) of the 74 employees were interviewed at the facility by MDHHS staff members using a standard questionnaire. A case of diarrheal illness was defined as three or more loose or watery stools in a 24-hour period since November 1. Twenty-one (31%) of the 67 employees interviewed had illness that was consistent with the case definition, with onset ranging from November 8 to December 11 (Figure). The employee with the earliest date of onset of illness was unable to recall the exact day she became ill. When interviewed on November 29, she reported becoming ill approximately 3 weeks earlier; therefore, her illness onset date was recorded as November 8.

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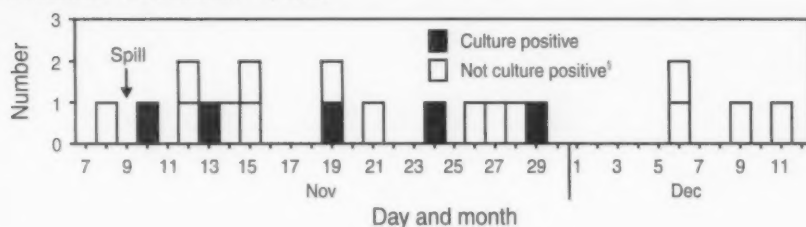
In addition to diarrhea, patients reported fatigue (86%), cramps (86%), body aches (71%), nausea (62%), headache (57%), chills (57%), fever (43%), vomiting (43%), and blood in stool (29%); none of the employees were hospitalized. No secondary cases in family members were identified. Five of eight stool specimens from eight patients submitted for culture were positive for SE. Among 33 workers in the production area, 18 (55%) had illness consistent with the case definition, compared with three (9%) of 34 workers in other areas of the facility (relative risk: 6.2; 95% confidence interval = 2.0–19.0). When analysis was restricted to workers in the production area, the strongest association with illness was working in room A. Eighteen (69%) of 26 employees who worked in room A (including those who did so intermittently) became ill, compared with none of the seven production-area workers who did not work in room A ($p=0.002$). During multiple visits to the facility, investigators noted inadequate handwashing and lack of PPE. Aside from working in room A, none of the exposures examined were significantly associated with illness.

On November 30, staff members collected 15 environmental swab specimens from the production area; the swabs were processed by a commercial laboratory used by the vaccine manufacturer. Nineteen additional environmental swabs from room A were collected and processed by MDHHS on December 19. All environmental swabs were negative for *Salmonella*. Six drinking water samples from three sites in the facility were collected on November 30 and processed by MDHHS; all were tested for *Escherichia coli* as a marker for bacterial contamination. All the samples were negative for *E. coli*. Testing of water samples for *E. coli* and fecal coliform also was conducted by the manufacturer; the results were negative.

Isolates of SE from four patients and the four vaccine stock cultures from the facility underwent pulsed field gel electrophoresis (PFGE) testing with two enzymes (XbaI and BlnI) by MDHHS and were determined to be indistinguishable. Phage typing was then performed on the SE isolates by the National Microbiology Laboratory of Canada in collaboration with CDC. Isolates from all four patients were phage type 8, matching the phage type of the spilled stock culture.

PFGE and phage typing also were performed on all seven SE isolates from ill Maine residents with no connection to the vaccine-production facility that were submitted to MDHHS during October–November 2006. The isolates were from four of Maine's 16 counties; none were from the

FIGURE. Number* of cases of diarrheal illness† among workers at a poultry vaccine-production facility, by date of illness onset and *Salmonella* culture status — Maine, November 1–December 13, 2006



* N = 21; onset date for one patient was unknown.

† A case of diarrheal illness was defined as three or more loose or watery stools in a 24-hour period in an employee during November 1–December 13, 2006.

‡ Includes three cases in which stool specimens were negative for *Salmonella* and 12 cases for which no culture was performed.

county where the vaccine facility was located. All seven isolates were indistinguishable from the phage type 8 isolates by PFGE testing on the first enzyme (XbaI); five of the seven isolates were tested on the second enzyme (BlnI), and all five matched the phage type 8 isolates. However, when phage typed, all seven isolates were determined to be phage type 13A.

Reported by: D Guppy, A Yartel, MPH, Maine Dept of Health and Human Svcs. A Pelletier, MD, Career Epidemiology Field Officer, CDC.

Editorial Note: *Salmonella* infections usually are acquired by eating contaminated food; however, some outbreaks have been associated with environmental contamination (1,2). *Salmonella* can survive in the environment for months (3), and the incubation period is 6–72 hours (4). Although the exact mechanism for infection of workers in this outbreak remains unknown, environmental contamination of room A likely was the source of SE infection. Workers might have become infected through hand-to-mouth activities after touching contaminated surfaces in room A. This mode of transmission is plausible because 1) the materials used in the clean-up of the spill were processed in room A before disposal, 2) the phage type of SE among four ill employees (type 8) was the same as that of the stock culture involved in the spill and different from that of the seven isolates from other SE cases (type 13A) reported in Maine during the same approximate period, 3) a strong epidemiologic association was determined between illness and working in room A, and 4) inadequate handwashing practices and lack of PPE were noted in room A. Person-to-person transmission also might have occurred because some persons continued to work at the facility while ill.

The findings in this report are subject to at least three limitations. First, staff members at the vaccine-production facility did not document details of the spill that occurred on November 9 until 20 days later, which might have introduced recall bias. Second, environmental specimens were not obtained until 3 weeks after the spill had occurred; routine cleaning and disinfecting had occurred during this interval. Finally, because of the clonal nature of SE, PFGE testing and phage typing alone might not be able to provide definitive strain discrimination; additional typing methods

might be required (5).

MDHHS recommended that the facility improve hand-washing practices among employees and, especially in room A, the use of PPE, including gloves and (where splashes might occur) gowns and face shields. MDHHS further recommended creation of procedures for handling spills and routinely disinfecting work areas and advised ill employees not to work until their symptoms resolved. Results of the investigation were shared with USDA, the Maine Department of Labor, and the Occupational Safety and Health Administration. USDA reinspected the facility in January 2007 and began a follow-up visit on August 28.

Acknowledgments

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References

1. Friedman CR, Torigian C, Shillam PJ, et al. An outbreak of salmonellosis among children attending a reptile exhibit at a zoo. *J Pediatr* 1998;132:802–7.
2. Smith KE, Anderson F, Medus C, Leano F, Adams J. Outbreaks of salmonellosis at elementary schools associated with dissection of owl pellets. *Vector-Borne Zoonotic Dis* 2005;5:133–6.
3. Morse EV, Duncan MA. Salmonellosis: an environmental health problem. *J Am Vet Med Assoc* 1974;165:1015–9.
4. Heymann DL, ed. Control of communicable diseases manual. 18th ed. Washington, DC: American Public Health Association; 2004:471.
5. Currie A, Akwar H, MacDonald W, et al. Home or away? Investigation of *Salmonella* Enteritidis PFGE pattern SENXA1.0003 and SENBN1.0003, phage type 8, in the Maritimes, 2005. *Can Commun Dis Rep* 2006;32:231–9.

National, State, and Local Area Vaccination Coverage Among Children Aged 19–35 Months — United States, 2006

The National Immunization Survey (NIS) provides vaccination coverage estimates among children aged 19–35 months for each of the 50 states and selected urban and county areas.* This report describes the findings of the 2006 NIS, which indicated increases in national coverage with pneumococcal conjugate vaccine (PCV) and varicella vaccine (VAR) and a stable coverage level for the 4:3:1:3:3:1 vaccine series (i.e., ≥ 4 doses of diphtheria, tetanus toxoid, and any acellular pertussis vaccine [DTaP][†]; ≥ 3 doses of poliovirus vaccine; ≥ 1 dose of measles, mumps, and rubella vaccine [MMR]; ≥ 3 doses of *Haemophilus influenzae* type b [Hib] vaccine; ≥ 3 doses of hepatitis B vaccine [HepB]; and ≥ 1 dose of VAR). However, national coverage estimates remained below the *Healthy People 2010* target of 90% coverage for PCV, DTaP, and VAR and below the 80% target for the 4:3:1:3:3:1 vaccine series (1). No significant racial/ethnic disparities in 4:3:1:3:3:1 series coverage were observed after controlling for family income. State and local immunization programs should continue to identify and target children who are not fully vaccinated, especially because of low socioeconomic status and other barriers.

To estimate coverage for all age-eligible children, NIS uses a quarterly, random-digit-dialed sample of telephone numbers for each survey area. NIS methodology, including the weighting of respondents to represent the population of children aged 19–35 months, has been described previously (2). During 2006, the household response rate (3) was 64.5%; a total of 21,044 children with provider-reported vaccination records were included in this report, representing 70.4% of all children with completed household interviews. Statistical analyses were conducted using

t tests and logistic regression modeling. All tests with $p < 0.05$ were regarded as statistically significant. An income-to-poverty ratio variable[§] was added to logistic regression models to control for racial/ethnic differences in family income, which was calculated using total household income, family size, and household composition and adjusted for annual cost of living using federal poverty guidelines (4).

Estimated national 4:3:1:3:3:1 vaccine series coverage did not change significantly from 2005 (76.1%) to 2006 (77.0%). In 2006, significant increases from 2005 levels were observed for PCV, VAR, and poliovirus vaccine (Table 1). The largest increases were observed for PCV; coverage increased from 82.8% to 87.0% for ≥ 3 doses of PCV and from 53.7% to 68.4% for ≥ 4 doses.

As in previous years, substantial differences were observed in vaccination coverage among states and local areas (5) for the 4:3:1:3:3:1 vaccine series and individual vaccines. Estimated coverage with the 4:3:1:3:3:1 vaccine series ranged from 83.6% in Massachusetts to 59.5% in Nevada (Table 2). Among local areas, 4:3:1:3:3:1 series coverage ranged from 81.4% in Boston, Massachusetts, to 65.2% in Detroit, Michigan. For vaccines with national coverage estimates below the 90% *Healthy People 2010* target (PCV, DTaP, and VAR), PCV (≥ 3 doses) coverage ranged from 96.6% in Rhode Island to 69.9% in South Dakota, DTaP (≥ 4 doses) coverage ranged from 92.6% in Massachusetts to 73.9% in Nevada, and VAR coverage ranged from 96.4% in Rhode Island to 75.7% in Wyoming (Table 2). MMR coverage by state ranged from 97.5% in North Carolina to 84.9% in Nevada (Table 2).

In 2006, vaccination coverage for the 4:3:1:3:3:1 vaccine series was 77.9% for white[‡] children, 77.4% for Hispanic children, 75.9% for Asian children, 74.4% for American Indian/Alaska Native children, and 73.9% for black children (Table 3). Series coverage was significantly lower overall for black children compared with white children. Among black children, coverage ranged from 71.9% (95% confidence interval [CI] = ± 4.8) among those living below the poverty level to 76.7% (CI = ± 3.1) among those living at or above the poverty level; among white children, coverage ranged from 69.5% (CI = ± 4.4) among those living below the poverty level to 78.9% (CI = ± 1.3) among

* The 30 local areas separately sampled for the 2006 NIS included six areas that receive federal immunization grant funds and are included in the NIS sample every year (District of Columbia; Chicago, Illinois; New York, New York; Philadelphia County, Pennsylvania; Bexar County, Texas; and Houston, Texas); 18 areas that were included each year during 1994–2004 (Maricopa County, Arizona; Los Angeles County, California; San Diego County, California; Santa Clara County, California; Duval County, Florida; Miami-Dade County, Florida; Fulton and DeKalb counties, Georgia; Marion County, Indiana; Baltimore, Maryland; Boston, Massachusetts; Detroit, Michigan; Newark, New Jersey; Cuyahoga County, Ohio; Shelby County, Tennessee; Dallas County, Texas; El Paso County, Texas; King County, Washington; and Milwaukee County, Wisconsin); and six areas sampled for the first time (northern California counties; Fresno County, California; eastern Kansas counties; southern New Mexico counties; Allegheny County, Pennsylvania; and eastern Washington counties).

[†] Also can include diphtheria and tetanus toxoid vaccine or diphtheria, tetanus toxoid, and pertussis vaccine.

[§] The income-to-poverty ratio variable had six levels: severe poverty (household income $< 50\%$ of the poverty level), intermediate poverty (50% to $< 100\%$ of the poverty level), near poverty (100% of the poverty level to 25% above the poverty level), low-middle income (25% to $< 300\%$ above the poverty level), middle income (300% to 600% above the poverty level), and upper income ($> 600\%$ above the poverty level).

[‡] For this report, persons identified as white, black, Asian, or American Indian/Alaska Native are all non-Hispanic. Persons identified as Hispanic might be of any race.

TABLE 1. Estimated vaccination coverage levels among children aged 19–35 months, by selected vaccines and doses — National Immunization Survey, United States, 2002–2006

Vaccine/Doses	2002*		2003†		2004‡		2005§		2006**	
	%	(95% CI)††	%	(95% CI)	%	(95% CI)	%	(95% CI)	%	(95% CI)
DTaP§§										
≥3 doses	94.9	(±0.6)	96.0	(±0.5)	95.9	(±0.5)	96.1	(±0.5)	95.8	(±0.5)
≥4 doses	81.6	(±0.9)	84.8	(±0.8)	85.5	(±0.8)	85.7	(±0.9)	85.2	(±0.9)
Poliovirus	90.2	(±0.7)	91.6	(±0.7)	91.6	(±0.7)	91.7	(±0.7)	92.9	(±0.6)
MMR¶¶ ≥1 dose	91.6	(±0.7)	93.0	(±0.6)	93.0	(±0.6)	91.5	(±0.7)	92.4	(±0.6)
Hib*** ≥3 doses	93.1	(±0.6)	93.9	(±0.6)	93.5	(±0.6)	93.9	(±0.6)	93.4	(±0.6)
Hepatitis B ≥3 doses	89.9	(±0.7)	92.4	(±0.6)	92.4	(±0.6)	92.9	(±0.6)	93.4	(±0.6)
Varicella ≥1 dose†††	80.6	(±0.9)	84.8	(±0.8)	87.5	(±0.7)	87.9	(±0.8)	89.3	(±0.7)
PCV§§§										
≥3 doses	40.8	(±1.1)	68.1	(±1.0)	73.2	(±1.0)	82.8	(±1.0)	87.0	(±0.8)
≥4 doses	—	—	35.8	(±1.0)	43.4	(±1.1)	53.7	(±1.3)	68.4	(±1.1)
Combined series										
4:3:1¶¶¶	78.5	(±1.0)	82.2	(±0.9)	83.5	(±0.9)	83.1	(±1.0)	83.2	(±0.9)
4:3:1:3****	77.5	(±1.0)	81.3	(±0.9)	82.5	(±0.9)	82.4	(±1.0)	82.3	(±1.0)
4:3:1:3:3††††	74.8	(±1.0)	79.4	(±0.9)	80.9	(±0.9)	80.8	(±1.0)	80.6	(±1.0)
4:3:1:3:3:1§§§§	65.5	(±1.1)	72.5	(±1.0)	76.0	(±1.0)	76.1	(±1.1)	77.0	(±1.0)

* Born during January 1999–July 2001.

† Born during January 2000–July 2002.

‡ Born during January 2001–July 2003.

§ Born during February 2002–July 2004.

** Born during January 2003–June 2005.

†† Confidence interval.

§§ Diphtheria, tetanus toxoid, and any acellular pertussis vaccine; also can include diphtheria and tetanus toxoid vaccine or diphtheria, tetanus toxoid, and pertussis vaccine.

¶¶ Measles, mumps, and rubella vaccine.

*** Haemophilus influenzae type b (Hib) vaccine.

††† ≥1 dose of varicella vaccine at or after child's first birthday.

§§§ Pneumococcal conjugate vaccine.

¶¶¶ ≥4 doses of DTaP, ≥3 doses of poliovirus vaccine, and ≥1 dose of MMR.

**** 4:3:1 plus ≥3 doses of Hib vaccine.

†††† 4:3:1:3 plus ≥3 doses of hepatitis B vaccine.

§§§§ 4:3:1:3:3 plus ≥1 dose of varicella vaccine.

children living at or above the poverty level. A logistic regression model that controlled for differences in income across racial/ethnic groups revealed no significant difference in coverage between black and white children.

Estimated coverage levels in 2006 for poliovirus vaccine, MMR, Hib vaccine, and HepB were above 90% for all racial/ethnic groups except for American Indian/Alaska Native children for MMR (89.1%) and Asian children for Hib vaccine (89.4%). Levels were below 90% for all racial/ethnic groups for DTaP (≥4 doses), VAR, and PCV, except for Asian children for VAR (92.9%) (Table 3). For DTaP (≥4 doses), coverage was lower overall among black children compared with white children and lower among all children living below the poverty level compared with all children living at or above the poverty level ($p < 0.05$) (Table 3). For DTaP, the coverage disparity between black and white children was not significant after controlling for family income using the income-to-poverty ratio variable. For PCV (≥4 doses), no disparity was observed between black (56.7%; CI = ±5.6) and white (60.2%; CI = ±4.6) children who lived below the poverty level. A significant

disparity in PCV (≥4 doses) coverage was observed between black (65.6%; CI = ±4.6) and white (72.3%; CI = ±1.4) children who lived at or above the poverty level. However, this disparity was not significant after analyses controlled for racial/ethnic differences in family income at or above the poverty level.

Reported by: KG Wooten, MA, N Darling, MPH, JA Singleton MS, A Shefer, MD, Immunization Svcs Div, National Center for Immunization and Respiratory Diseases, CDC.

Editorial Note: Vaccination coverage in 2006 remained at or near record levels for routinely recommended childhood vaccines, but increases in DTaP, PCV, and VAR coverage are needed to reach the 90% *Healthy People 2010* target for individual vaccines; these increases would contribute substantially to improved coverage with the 4:3:1:3:3:1 series, particularly among disadvantaged populations. Although coverage with the fourth dose of PCV continued to increase in 2006, a significant disparity was observed among children who lived below the poverty level compared with children who lived at or above the poverty level. Receipt of the fourth dose of PCV might have been deferred for some of

TABLE 2. Estimated vaccination coverage levels for the 4:3:1:3:3:1* series and selected† individual vaccines among children aged 19–35 months, by state and selected local areas — National Immunization Survey, United States, 2006§

State/Area	≥4 DTap [¶]	≥1 MMR ^{**}	≥1 Varicella ^{††}	≥3 PCV ^{§§}	4:3:1:3:3:1
	% (95% CI ^{¶¶})	% (95% CI)	% (95% CI)	% (95% CI)	% (95% CI)
United States	85.2 (±0.9)	92.4 (±0.6)	89.3 (±0.7)	87.0 (±0.8)	77.0 (±1.0)
Alabama	85.9 (±6.2)	94.0 (±4.0)	94.5 (±3.4)	92.3 (±3.7)	79.1 (±6.9)
Alaska	77.3 (±6.4)	85.8 (±5.1)	80.4 (±5.8)	83.2 (±5.9)	67.3 (±7.0)
Arizona	80.3 (±4.2)	87.8 (±3.5)	83.1 (±4.0)	87.6 (±3.4)	70.6 (±4.7)
Maricopa County	79.6 (±5.6)	87.3 (±4.7)	82.2 (±5.3)	86.9 (±4.5)	68.2 (±6.2)
Rest of state	81.5 (±6.1)	88.5 (±5.0)	84.8 (±5.7)	88.9 (±4.8)	75.2 (±6.8)
Arkansas	78.0 (±8.7)	85.9 (±6.7)	87.7 (±6.6)	84.7 (±6.4)	72.9 (±8.9)
California	85.1 (±3.8)	92.9 (±2.6)	91.5 (±2.9)	90.2 (±3.1)	78.6 (±4.2)
Fresno County	81.6 (±5.1)	92.5 (±3.5)	89.7 (±4.1)	90.0 (±3.9)	73.5 (±6.2)
Los Angeles County	85.0 (±5.3)	92.0 (±3.9)	89.5 (±4.5)	91.2 (±3.8)	78.5 (±5.9)
Northern California	81.0 (±5.2)	89.1 (±4.2)	84.1 (±4.9)	80.8 (±5.3)	71.3 (±6.1)
San Diego County	88.2 (±4.1)	91.4 (±4.1)	89.8 (±4.5)	90.1 (±4.5)	80.3 (±5.5)
Santa Clara County	85.9 (±5.0)	94.6 (±2.8)	92.8 (±3.4)	87.5 (±4.7)	77.7 (±6.0)
Rest of state	84.9 (±6.4)	93.6 (±4.4)	92.9 (±4.8)	90.2 (±5.3)	79.1 (±7.1)
Colorado	84.7 (±6.8)	88.2 (±6.0)	85.6 (±6.0)	80.4 (±7.5)	75.9 (±7.8)
Connecticut	91.5 (±4.1)	96.5 (±2.0)	92.6 (±3.2)	93.5 (±3.4)	82.0 (±5.2)
Delaware	89.4 (±5.3)	96.5 (±2.6)	92.2 (±4.3)	89.5 (±4.9)	80.3 (±6.8)
District of Columbia	85.1 (±5.0)	92.1 (±3.5)	91.1 (±3.9)	86.1 (±4.5)	78.4 (±5.8)
Florida	85.1 (±4.0)	91.8 (±3.1)	91.9 (±3.1)	82.2 (±4.8)	80.2 (±4.2)
Duval County	83.7 (±4.9)	91.8 (±3.4)	90.4 (±3.9)	82.8 (±4.8)	76.3 (±5.5)
Miami-Dade County	87.0 (±5.3)	93.9 (±3.2)	94.3 (±3.3)	82.3 (±5.1)	79.9 (±6.1)
Rest of state	84.8 (±4.9)	91.3 (±3.9)	91.6 (±3.9)	82.2 (±6.0)	80.6 (±5.2)
Georgia	88.4 (±3.9)	91.0 (±3.7)	92.7 (±3.1)	81.6 (±4.5)	81.4 (±4.6)
Fulton and DeKalb counties	86.3 (±5.9)	93.6 (±4.2)	86.3 (±6.3)	84.6 (±6.5)	74.9 (±7.6)
Rest of state	88.9 (±4.6)	90.4 (±4.4)	94.1 (±3.4)	81.0 (±5.3)	82.8 (±5.4)
Hawaii	84.5 (±5.6)	89.9 (±4.7)	89.6 (±4.5)	91.6 (±3.7)	78.8 (±6.2)
Idaho	82.5 (±6.6)	88.2 (±5.3)	79.0 (±6.4)	91.6 (±4.0)	68.8 (±7.7)
Illinois	84.0 (±5.6)	89.2 (±5.0)	85.4 (±4.7)	85.6 (±5.1)	74.1 (±6.1)
City of Chicago	85.1 (±4.9)	88.5 (±4.7)	87.1 (±4.8)	88.8 (±4.7)	77.3 (±5.8)
Rest of state	83.7 (±7.3)	89.5 (±6.6)	84.8 (±6.1)	84.5 (±6.7)	73.0 (±7.9)
Indiana	84.5 (±4.9)	89.5 (±4.3)	88.0 (±4.4)	87.3 (±4.8)	75.9 (±5.8)
Marion County	85.4 (±5.1)	90.2 (±4.2)	88.0 (±4.7)	90.6 (±4.0)	76.7 (±6.0)
Rest of state	84.3 (±5.8)	89.4 (±5.1)	87.9 (±5.2)	86.6 (±5.7)	75.7 (±6.9)
Iowa	88.4 (±4.9)	90.4 (±4.7)	87.0 (±5.3)	87.6 (±5.0)	79.0 (±6.2)
Kansas	87.1 (±4.0)	92.8 (±3.2)	82.7 (±4.6)	87.1 (±4.0)	70.1 (±5.5)
Eastern Kansas	87.0 (±4.7)	90.9 (±4.0)	83.8 (±5.2)	92.9 (±3.6)	73.7 (±6.2)
Rest of state	87.2 (±5.2)	93.4 (±4.1)	82.3 (±6.0)	85.1 (±5.3)	68.8 (±7.2)
Kentucky	87.1 (±4.7)	91.8 (±4.0)	90.2 (±4.2)	85.8 (±4.9)	79.0 (±6.0)
Louisiana	76.7 (±6.7)	88.9 (±4.3)	87.5 (±4.7)	86.2 (±5.6)	69.6 (±7.1)
Maine	88.1 (±5.4)	92.2 (±4.5)	89.3 (±5.7)	87.2 (±6.1)	75.7 (±7.0)
Maryland	86.9 (±4.4)	96.1 (±3.0)	93.5 (±3.4)	90.1 (±3.6)	78.3 (±5.5)
City of Baltimore	81.3 (±6.7)	93.3 (±3.6)	89.6 (±4.8)	86.4 (±5.4)	72.2 (±7.4)
Rest of state	87.7 (±4.9)	96.5 (±3.4)	94.1 (±3.9)	90.7 (±4.1)	79.1 (±6.3)
Massachusetts	92.6 (±3.5)	96.6 (±2.4)	93.4 (±3.3)	95.4 (±2.7)	83.6 (±5.0)
City of Boston	88.1 (±4.4)	95.4 (±2.7)	90.4 (±3.8)	93.4 (±3.2)	81.4 (±5.1)
Rest of state	93.1 (±3.8)	96.7 (±2.6)	93.8 (±3.7)	95.6 (±3.0)	83.8 (±5.5)
Michigan	84.9 (±4.4)	92.2 (±3.4)	89.9 (±3.8)	85.2 (±4.4)	77.9 (±5.0)
City of Detroit	74.0 (±6.6)	83.8 (±5.5)	84.1 (±5.4)	77.0 (±6.4)	65.2 (±7.1)
Rest of state	86.2 (±4.9)	93.2 (±3.8)	90.6 (±4.2)	86.1 (±4.8)	79.4 (±5.6)
Minnesota	87.4 (±5.0)	92.3 (±4.0)	82.7 (±5.7)	92.5 (±3.6)	77.6 (±6.3)
Mississippi	79.8 (±6.5)	88.4 (±4.9)	87.0 (±5.4)	80.6 (±6.2)	73.3 (±7.1)
Missouri	87.1 (±5.4)	95.8 (±3.9)	90.3 (±4.5)	84.0 (±5.4)	80.7 (±5.8)
Montana	76.2 (±6.3)	87.2 (±5.5)	76.2 (±6.2)	82.5 (±5.8)	65.6 (±6.6)
Nebraska	84.3 (±5.8)	91.6 (±4.3)	86.4 (±4.9)	85.8 (±5.4)	74.9 (±6.4)
Nevada	73.9 (±6.7)	84.9 (±5.6)	80.1 (±6.3)	73.7 (±6.7)	59.5 (±7.4)
New Hampshire	87.7 (±4.8)	93.0 (±3.6)	86.3 (±4.9)	89.1 (±4.8)	76.3 (±6.1)
New Jersey	85.5 (±5.2)	91.3 (±3.8)	92.5 (±3.4)	85.8 (±4.9)	76.1 (±6.3)
City of Newark	78.0 (±6.1)	89.7 (±4.2)	86.8 (±5.0)	79.8 (±5.8)	68.1 (±7.0)
Rest of state	85.8 (±5.4)	91.4 (±3.9)	92.7 (±3.5)	86.1 (±5.1)	76.5 (±6.5)

TABLE 2. (Continued) Estimated vaccination coverage levels for the 4:3:1:3:3:1* series and selected† individual vaccines among children aged 19–35 months, by state and selected local areas — National Immunization Survey, United States, 2006§

State/Area	≥4 DTaP¶		≥1 MMR**		≥1 Varicella††		≥3 PCV§§		4:3:1:3:3:1	
	%	(95% CI¶¶)	%	(95% CI)	%	(95% CI)	%	(95% CI)	%	(95% CI)
New Mexico	79.5	(±5.0)	89.2	(±3.9)	82.8	(±4.8)	83.9	(±4.2)	71.6	(±5.4)
Southern New Mexico	79.6	(±5.6)	87.3	(±4.5)	84.4	(±5.0)	82.0	(±5.6)	71.3	(±6.3)
Rest of state	79.5	(±6.8)	90.0	(±5.2)	82.2	(±6.6)	84.8	(±5.5)	71.8	(±7.3)
New York	87.7	(±3.6)	95.5	(±2.8)	90.6	(±2.9)	88.0	(±3.4)	78.7	(±4.3)
City of New York	81.3	(±6.0)	95.8	(±2.5)	89.4	(±4.0)	83.4	(±5.7)	72.0	(±6.4)
Rest of state	93.5	(±3.8)	95.3	(±4.8)	91.6	(±4.3)	92.3	(±3.8)	84.9	(±5.5)
North Carolina	89.1	(±4.7)	97.5	(±2.1)	95.6	(±3.3)	92.7	(±4.6)	81.5	(±6.4)
North Dakota	86.9	(±4.5)	91.7	(±3.8)	88.9	(±4.1)	90.9	(±3.8)	80.1	(±5.2)
Ohio	84.7	(±4.7)	93.6	(±3.0)	87.0	(±4.1)	87.5	(±4.1)	75.0	(±5.5)
Cuyahoga County	89.9	(±4.4)	94.3	(±3.7)	86.8	(±5.3)	89.3	(±4.8)	77.3	(±6.5)
Rest of state	84.0	(±5.3)	93.5	(±3.3)	87.1	(±4.6)	87.3	(±4.5)	74.7	(±6.1)
Oklahoma	86.3	(±4.7)	94.0	(±3.2)	92.3	(±3.7)	78.7	(±5.9)	77.6	(±5.6)
Oregon	82.6	(±5.6)	88.7	(±4.5)	81.7	(±5.8)	87.0	(±4.7)	73.2	(±6.6)
Pennsylvania	87.5	(±4.3)	94.7	(±2.3)	90.8	(±3.0)	91.2	(±3.3)	80.8	(±4.7)
Allegheny County	85.7	(±5.5)	89.8	(±5.6)	89.9	(±5.1)	93.3	(±3.7)	74.0	(±7.2)
Philadelphia County	83.8	(±6.5)	93.6	(±4.7)	92.7	(±4.9)	89.0	(±5.3)	78.4	(±7.0)
Rest of state	88.5	(±5.5)	95.5	(±2.8)	90.5	(±3.8)	91.4	(±4.2)	82.0	(±6.0)
Rhode Island	86.6	(±4.6)	96.2	(±2.4)	96.4	(±2.1)	96.6	(±2.1)	80.6	(±5.1)
South Carolina	85.3	(±5.2)	93.9	(±3.7)	90.5	(±4.8)	88.0	(±5.5)	79.6	(±5.8)
South Dakota	85.5	(±5.3)	94.4	(±3.0)	83.4	(±5.6)	69.9	(±6.3)	74.4	(±6.5)
Tennessee	86.1	(±5.0)	93.3	(±3.2)	87.6	(±4.5)	90.2	(±4.0)	76.8	(±5.9)
Shelby County	82.5	(±6.0)	88.3	(±5.5)	87.4	(±4.8)	90.5	(±4.5)	74.2	(±6.8)
Rest of state	86.9	(±6.0)	94.4	(±3.7)	87.6	(±5.4)	90.1	(±4.8)	77.4	(±7.1)
Texas	81.4	(±3.3)	92.0	(±2.0)	90.8	(±2.2)	85.0	(±3.2)	74.7	(±3.7)
Bexar County	80.2	(±6.3)	89.2	(±4.7)	90.5	(±4.6)	90.1	(±4.4)	74.7	(±6.8)
City of Houston	77.3	(±5.7)	87.5	(±4.5)	84.9	(±5.1)	82.4	(±5.2)	69.9	(±6.3)
Dallas County	80.4	(±6.4)	92.7	(±4.4)	89.8	(±5.4)	85.0	(±5.8)	73.9	(±7.1)
El Paso County	78.8	(±5.5)	88.9	(±4.5)	88.2	(±4.6)	83.0	(±5.3)	68.8	(±5.9)
Rest of state	82.7	(±4.7)	93.2	(±2.8)	92.2	(±3.0)	85.1	(±4.6)	76.1	(±5.3)
Utah	84.4	(±5.7)	92.4	(±4.1)	89.2	(±4.7)	79.7	(±5.0)	78.0	(±6.3)
Vermont	88.6	(±4.9)	95.1	(±2.5)	80.9	(±5.4)	85.2	(±8.2)	75.2	(±5.9)
Virginia	86.2	(±4.8)	93.6	(±3.5)	89.1	(±4.2)	86.4	(±5.4)	77.4	(±5.7)
Washington	86.3	(±3.9)	88.3	(±3.6)	79.1	(±4.7)	85.7	(±4.2)	71.4	(±5.1)
Eastern Washington	90.4	(±3.9)	94.5	(±3.0)	81.7	(±5.7)	87.9	(±4.7)	72.2	(±6.5)
King County	84.2	(±7.7)	87.0	(±6.9)	79.7	(±8.4)	86.6	(±7.4)	69.2	(±9.3)
Rest of state	86.5	(±5.4)	87.6	(±5.0)	78.3	(±6.7)	84.8	(±6.1)	72.3	(±7.2)
West Virginia	83.2	(±5.9)	91.2	(±4.3)	80.7	(±6.4)	78.3	(±6.6)	68.4	(±7.1)
Wisconsin	92.1	(±2.9)	94.0	(±2.7)	88.4	(±4.0)	93.0	(±3.2)	80.5	(±4.8)
Milwaukee County	89.5	(±4.2)	94.1	(±3.0)	92.4	(±3.4)	89.1	(±4.7)	78.1	(±6.8)
Rest of state	92.8	(±3.5)	94.0	(±3.3)	87.4	(±5.0)	94.0	(±3.8)	81.1	(±5.8)
Wyoming	77.4	(±5.8)	87.7	(±4.7)	75.7	(±6.3)	78.7	(±5.6)	63.5	(±6.8)

* Includes ≥4 doses of diphtheria, tetanus toxoid, and any acellular pertussis vaccine (DTaP) (also can include diphtheria and tetanus toxoid vaccine or diphtheria, tetanus toxoid, and pertussis vaccine); ≥3 doses of poliovirus vaccine; ≥1 dose of measles, mumps, and rubella vaccine; ≥3 doses of *Haemophilus influenzae* type b vaccine; ≥3 doses of hepatitis B vaccine; and ≥1 dose of varicella vaccine.

† Individual vaccines were selected because coverage was below the *Healthy People 2010* target of 90%, except measles, mumps, and rubella vaccine, which was included as an example of a vaccine with higher coverage for comparison. Coverage estimates for other vaccines and vaccine series are available at <http://www.cdc.gov/vaccines/stats-surv/imz-coverage.htm#chart>.

§ Children in the 2006 National Immunization Survey were born during January 2003–June 2005.

¶ ≥4 doses of DTaP.

** ≥1 dose of measles, mumps, and rubella vaccine.

†† ≥1 dose of varicella vaccine at or after child's first birthday.

§§ ≥3 doses of pneumococcal conjugate vaccine.

¶¶ Confidence interval.

the older children in the 2006 NIS cohort (i.e., those born during January 2003–June 2005) because of the vaccine shortage that ended in September 2004 (6).

Results from the 2005 NIS indicated no disparity in 4:3:1:3:3:1 series coverage between black and white

children. The results of the 2006 NIS indicate that disparities in coverage by poverty level, coupled with different income distributions among white and black populations, account for the observed coverage disparities between black and white children. A previous report using

TABLE 3. Estimated vaccination coverage levels among children aged 19–35 months, by selected vaccines and doses, race/ethnicity,* and poverty level† — National Immunization Survey, United States, 2006‡

Vaccine/Doses	White, non-Hispanic	Black, non-Hispanic	Hispanic	American Indian/ Alaska Native	Asian	Below poverty level	At or above poverty level
	% (95% CI) [§]	% (95% CI)	% (95% CI)	% (95% CI)	% (95% CI)	% (95% CI)	% (95% CI)
DTaP**							
≥3 doses	96.4 (±0.6)	93.6 (±1.7)	95.9 (±0.9)	95.1 (±3.6)	96.9 (±1.7)	94.2 (±1.2)	96.4 (±0.5)
≥4 doses	86.6 (±1.1)	81.4 (±2.7)	84.7 (±1.8)	81.9 (±8.9)	85.8 (±5.5)	81.0 (±2.0)	86.8 (±1.0)
Poliovirus	93.3 (±0.7)	90.7 (±1.9)	93.4 (±1.1)	91.3 (±5.0)	92.4 (±5.0)	92.1 (±1.3)	93.1 (±0.7)
MMR†† ≥1 dose	92.8 (±0.8)	91.0 (±1.9)	92.1 (±1.4)	89.1 (±5.5)	94.6 (±2.8)	91.1 (±1.3)	93.1 (±0.7)
Hib§§ ≥3 doses	94.0 (±0.8)	91.1 (±1.9)	94.0 (±1.1)	93.9 (±3.8)	89.4 (±3.5)	91.3 (±1.4)	94.1 (±0.7)
Hepatitis B ≥3 doses	93.9 (±0.7)	91.5 (±1.9)	93.6 (±1.1)	95.3 (±3.2)	91.5 (±3.4)	92.9 (±1.2)	93.5 (±0.7)
Varicella ≥1 dose¶¶	88.8 (±0.9)	89.2 (±2.0)	89.8 (±1.6)	84.9 (±6.2)	92.9 (±2.8)	88.6 (±1.4)	90.0 (±0.7)
PCV***							
≥3 doses	87.2 (±1.0)	83.3 (±2.5)	89.1 (±1.7)	86.8 (±6.3)	81.1 (±5.5)	84.5 (±2.0)	88.0 (±0.9)
≥4 doses	70.8 (±1.4)	61.1 (±3.4)	67.5 (±2.4)	62.0 (±9.9)	64.8 (±6.5)	61.8 (±2.5)	71.1 (±1.2)
Combined series							
4:3:1†††	84.7 (±1.1)	79.1 (±2.7)	82.3 (±2.0)	80.0 (±9.0)	84.9 (±5.5)	79.4 (±2.0)	84.8 (±1.1)
4:3:1:3¶¶¶	83.9 (±1.1)	78.6 (±2.8)	81.7 (±2.0)	79.5 (±9.0)	80.4 (±5.7)	78.2 (±2.1)	84.0 (±1.1)
4:3:1:3:3¶¶¶	82.2 (±1.2)	76.8 (±2.8)	80.1 (±2.1)	78.6 (±9.0)	78.4 (±5.8)	76.6 (±2.1)	82.2 (±1.1)
4:3:1:3:3:1****	77.9 (±1.2)	73.9 (±2.9)	77.4 (±2.1)	74.4 (±9.2)	75.9 (±5.9)	73.8 (±2.2)	78.4 (±1.2)

* Native Hawaiian or other Pacific Islanders and persons of multiple races were not included because of small sample sizes.

† Children are classified as below poverty level if their total family income is less than the federal poverty threshold specified for the applicable family size and number of children aged <18 years. All others are classified as at or above poverty. Poverty thresholds reflect yearly changes in the Consumer Price Index. Information about poverty thresholds and guidelines is available at <http://www.census.gov/hhes/www/poverty.html>.

‡ Children in the 2006 National Immunization Survey were born during January 2003–June 2005.

§ Confidence interval.

** Diphtheria, tetanus toxoid, and any acellular pertussis vaccine; also can include diphtheria and tetanus toxoid vaccine or diphtheria, tetanus toxoid, and pertussis vaccine.

†† Measles, mumps, and rubella vaccine.

§§ *Haemophilus influenzae* type b (Hib) vaccine.

¶¶ ≥1 dose of varicella vaccine at or after child's first birthday.

*** Pneumococcal conjugate vaccine.

††† ≥4 doses of DTaP, ≥3 doses of poliovirus vaccine, and ≥1 dose of MMR.

¶¶¶ 4:3:1 plus ≥3 doses of Hib vaccine.

¶¶¶ 4:3:1:3 plus ≥3 doses of hepatitis B vaccine.

**** 4:3:1:3:3 plus ≥1 dose of varicella vaccine.

1999–2003 NIS data determined that socioeconomic factors had a similar effect on associations between vaccination coverage and race/ethnicity (7). Nearly 41% of all black children aged <5 years live below the poverty level, compared with 16% of white children (8). Children who live below the poverty level are less likely to be vaccinated than children who live at or above the poverty level. The 1999–2003 report led to the development of a questionnaire module of socioeconomic variables that will be added to the NIS in 2008 and will be used to identify barriers to vaccination among racial/ethnic groups and socioeconomically disadvantaged populations. Increasing overall vaccination coverage, eliminating coverage disparities associated with socioeconomic differences in families with children, and eliminating disparities among states and local areas remain high priorities for national, state, and local immunization programs. Vaccination funding through the federal Vaccines for Children program (9) has contributed to record coverage levels among children who are uninsured or underinsured, but additional measures are needed to deliver vaccines to children who live below the poverty level.

The findings in this report are subject to at least three limitations. First, because NIS is a telephone survey, results are weighted to be representative of all children aged

19–35 months. Although statistical adjustments were made to account for nonresponse and households without landline telephones, some bias might remain. Second, underestimates of vaccination coverage might have resulted from the exclusive use of provider-reported vaccination histories because completeness of these records is unknown. Finally, although national estimates of vaccination coverage are precise, estimates for state and local areas should be interpreted with caution because their sample sizes are smaller and their confidence intervals generally are wider than those for national estimates.

Although vaccination-coverage estimates were above the *Healthy People 2010* target among all racial/ethnic groups for most of the routinely recommended vaccines, continued collaboration among national, state, local, private, and public partners is needed to reach the 90% target for all vaccines by 2010. Vaccination-coverage data gathered through NIS are used to identify children who are at risk for vaccine-preventable diseases, evaluate the effectiveness of programs designed to increase coverage levels, assess differential impact of vaccine shortages, and track uptake of new vaccines. Expansion of NIS (e.g., adding local areas for coverage assessment; adding survey questions about health insurance coverage, day care participation, and parental

beliefs and attitudes regarding vaccines; and including more expansive measures of socioeconomic status) will provide greater understanding of factors associated with low vaccination coverage, particularly those associated with socioeconomically disadvantaged populations.

References

1. US Department of Health and Human Services. Healthy people 2010 (conference ed, in 2 vols). Washington, DC: US Department of Health and Human Services; 2000. Available at <http://www.health.gov/healthypeople>.
2. Smith PJ, Hoaglin DC, Battaglia MP, Khare M, Barker LE, CDC. Statistical methodology of the National Immunization Survey, 1994–2002. *Vital Health Stat* 2005;2(138). Available at http://www.cdc.gov/nchs/data/series/sr_02/sr02_138.pdf.
3. Ezzati-Rice, TM, Frankel MR, Hoaglin DC, Loft JD, Coronado VG, Wright RA. An alternative measure of response rate in random-digit-dialing surveys that screen for eligible subpopulations. *J Econ Soc Meas* 2000;26:99–109.
4. US Census Bureau. How the Census Bureau measures poverty (official measure). Available at <http://www.census.gov/hhes/www/poverty/povdef.html>.
5. CDC. National, state, and urban area vaccination coverage among children aged 19–35 months—United States, 2005. *MMWR* 2006;55:988–93.
6. CDC. Pneumococcal conjugate vaccine shortage resolved. *MMWR* 2004;53:851–2.
7. Wooten KG, Luman ET, Barker LE. Socioeconomic factors and persistent racial disparities in childhood vaccination. *Am J Health Behav* 2007;31:434–45.
8. US Census Bureau. American factfinder: 2005 American Community Survey, selected population profile. Available at <http://factfinder.census.gov>.
9. CDC. Vaccines for Children Program. Available at <http://www.cdc.gov/vaccines/programs/vfc/default.htm>.

National Vaccination Coverage Among Adolescents Aged 13–17 Years — United States, 2006

Before 2005, vaccines were administered during adolescence to “catch up”^{*} children with vaccinations not received at a younger age, with the exception of the tetanus and diphtheria (Td) booster (1). However, since 2005, three new vaccines specifically for older children have been licensed and recommended in the United States: meningococcal conjugate vaccine (MCV4) for those aged 11–12 years and 15 years[†]; tetanus toxoid, reduced diphtheria

toxoid, and acellular pertussis (Tdap) vaccine for those aged 11–12 years (or at ages 13–18 years if not received at ages 11–12 years); and human papillomavirus (HPV) vaccine for girls aged 11–12 years (or at ages 13–18 years if not received at 11–12 years). Since 1996, the Advisory Committee on Immunization Practices (ACIP) and professional organizations, including the American Academy of Pediatrics (AAP), the American Academy of Family Physicians (AAFP), and the American Medical Association (AMA), have recommended a health-care visit at ages 11–12 years for receipt of recommended vaccinations (2). In addition, a *Healthy People 2010* objective (14-27) is to achieve ≥90% vaccination coverage among adolescents aged 13–15 years (3) for certain vaccines.[§] In 2006, for the first time, the National Immunization Survey (NIS) collected provider-reported vaccination information for adolescents aged 13–17 years (NIS-Teen). This report describes the results of that survey, which indicated that the *Healthy People 2010* target has not been met for any of the vaccines analyzed. HPV vaccination coverage is not included in this report because NIS-Teen was conducted before HPV vaccination recommendations were published in March 2007. Routine health-care visits for adolescents should be encouraged, with emphasis on a visit at ages 11–12 years, and providers should continue to assess the need for vaccinations at every opportunity. NIS-Teen will be conducted annually to monitor coverage with recommended vaccines during ages 11–17 years and to identify groups with lower coverage.

NIS, which traditionally monitors vaccination coverage for children aged 19–35 months, has been conducted by CDC since 1994. NIS-Teen is a random-digit-dialed telephone survey that collects vaccination information using methods similar to those of NIS, including use of vaccination records from health-care providers to determine vaccination coverage estimates (4,5). During October 2006–February 2007, a total of 5,468 household interviews were conducted with parents or guardians of adolescents aged 13–17 years.[¶] The household response rate was 56.2%; a total of 2,882 adolescents with provider-reported vaccination records were included in this report, representing 52.7% of adolescents with completed household interviews.

Coverage with ≥1 dose of either Td or Tdap vaccine after age 10 years was 60.1% (95% confidence interval [CI] =

^{*} Catch-up can refer either to vaccinations that are administered because they were recommended but missed or vaccinations administered to persons who were born before a particular vaccine became available or before a vaccine was routinely recommended for infants (e.g., hepatitis B, varicella, or measles, mumps, and rubella).

[†] In June 2007, after the National Immunization Survey–Teen interviews included in this report were completed, MCV4 recommendations were simplified to include all persons aged 11–18 years.

[§] For ≥3 doses hepatitis B vaccine; ≥2 doses measles, mumps, and rubella vaccine; ≥1 dose Td booster; and ≥1 dose varicella vaccine among those without a reported history of disease. In addition, the target for any new ACIP-recommended vaccine is ≥90% coverage within 5 years of the recommendation.

[¶] Eligible adolescents included those born during October 7, 1988–February 7, 1994.

TABLE. Estimated vaccination coverage among adolescents aged 13–17 years,* by selected vaccines and age — National Immunization Survey – Teen, United States, 2006

Vaccine	Age (yrs)											
	13		14		15		16		17		13–17	
	(n = 570)		(n = 566)		(n = 632)		(n = 574)		(n = 540)		(N = 2,882)	
	%	(95% CI) [†]	%	(95% CI)	%	(95% CI)	%	(95% CI)	%	(95% CI)	%	(95% CI)
MMR, [‡] ≥2 doses	87.0	(82.8–90.3)	90.1	(86.0–93.1)	88.3	(85.0–90.9)	83.0	(77.9–87.1)	85.8	(81.9–88.9)	86.9	(85.2–88.5)
Hepatitis B, ≥3 doses	88.6	(84.5–91.6)	84.6	(80.1–88.2)	80.0	(75.9–83.6)	75.6	(70.4–80.2)	77.3	(72.5–81.4)	81.3	(79.4–83.1)
Varicella												
Adolescents with history of varicella disease [§]	60.5	(55.3–65.4)	60.6	(55.3–65.7)	72.9	(68.4–76.9)	74.1	(68.9–78.6)	82.1	(77.9–85.7)	69.9	(67.7–72.0)
≥1 dose among adolescents without history of varicella disease	73.3	(66.1–79.5)	72.9	(64.6–79.9)	64.9	(55.7–73.1)	54.7	(43.5–65.5)**	46.3	(35.0–58.1)**	65.5	(61.4–69.4)
Adolescents with history of varicella disease or who had received ≥1 dose varicella vaccination	89.5	(86.1–92.1)	89.3	(85.5–92.2)	90.5	(87.1–93.0)	88.3	(83.7–91.7)	90.4	(87.1–92.9)	89.6	(88.1–90.9)
Td or Tdap^{††} (since age 10 yrs)												
≥1 dose Td or Tdap	48.3	(43.1–53.7)	57.1	(51.8–62.2)	64.2	(59.4–68.7)	62.7	(57.3–67.9)	68.6	(63.4–73.4)	60.1	(57.8–62.4)
≥1 dose Tdap	12.7	(9.6–16.5)	15.4	(11.8–19.8)	12.1	(9.3–15.5)	8.0	(5.3–11.9)	5.1	(3.3–7.7)	10.8	(9.4–12.3)
≥1 dose Td	35.7	(30.7–40.9)	41.7	(36.7–46.9)	52.1	(47.2–57.0)	54.8	(49.4–60.0)	63.5	(58.2–68.5)	49.4	(47.0–51.7)
MCV4, ^{§§} 1 dose	11.3	(8.6–14.8)	12.5	(9.4–16.5)	13.9	(10.9–17.6)	13.2	(10.2–16.9)	7.1	(5.0–10.0)	11.7	(10.3–13.2)

* Age and vaccination receipt determined at time of household interview. Vaccination coverage estimates include only adolescents who had adequately complete provider-reported vaccination records.

† Confidence interval.

‡ Measles, mumps, and rubella.

§ Based on health-care provider records or reports from parent or guardian.

** Estimate might not be reliable if the confidence interval (CI) half-width is >10 or the CI half-width / Estimate is >0.5.

†† Tetanus toxoid and diphtheria (Td) or tetanus toxoid, reduced diphtheria toxoid, and acellular pertussis (Tdap). Td or Tdap booster is recommended at ages 11–12 years. Tdap was licensed and recommended in 2005.

§§ Meningococcal conjugate vaccine. Includes those receiving MCV4 or an unspecified type of meningococcal vaccine. At the time of the survey, MCV4 was recommended for adolescents aged 11–12 years and previously unvaccinated adolescents at high-school entry (those aged approximately 15 years). MCV4 was licensed and recommended in 2005.

57.8–62.4) (Table). Overall vaccination coverage with Td vaccine was 49.4% (CI = 47.0–51.7) and ranged from 35.7% among adolescents aged 13 years to 63.5% among those aged 17 years. In 2005, Tdap vaccine was licensed and recommended to replace a single dose of Td vaccine. Coverage with 1 dose of Tdap vaccine was 10.8% (CI = 9.4–12.3) and ranged from 5.1% among adolescents aged 17 years to 15.4% among those aged 14 years.

Coverage with ≥3 doses of hepatitis B vaccine among all adolescents aged 13–17 years was 81.3% (CI = 79.4–83.1); coverage was higher among adolescents aged 13–14 years than among those aged 15–17 years (Table). Overall coverage with measles, mumps, and rubella (MMR) vaccine also was high (86.9% [CI = 85.2–88.5]), with no substantial differences by age.

Almost three fourths of adolescents had a history of varicella disease (69.9% [CI = 67.7–72.0]) (by parental report or provider history). Among adolescents without a history of varicella disease, 65.5% (CI = 61.4–69.4) had received ≥1 dose of varicella vaccine.

MCV4 vaccination had been received by 11.7% (CI = 10.3–13.2) of adolescents aged 13–17 years; the highest coverage was among those aged 15 years (13.9% [CI =

10.9–17.6]). Adolescents aged 17 years had the lowest MCV4 coverage (7.1% [CI = 5.0–10.0]; $p < 0.05$).

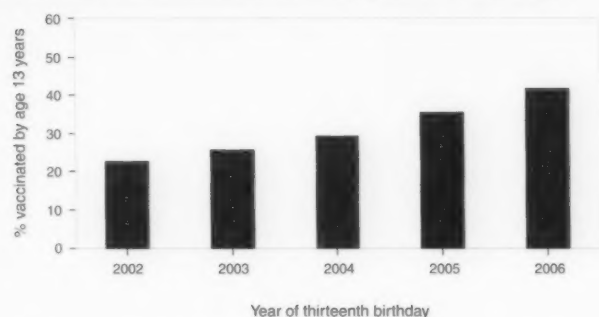
To assess progress in achieving *Healthy People 2010* objectives (which do not include adolescents aged 16–17 years), vaccination coverage was determined only for adolescents aged 13–15 years. Coverage was 84.3% (CI = 82.0–86.4) for ≥3 doses of hepatitis B vaccine, 88.5% (CI = 86.4–90.3) for ≥2 doses of MMR vaccine, and 56.7% (CI = 53.7–59.7) for ≥1 dose of Td or Tdap booster; coverage was 70.9% (CI = 66.3–75.1) for ≥1 dose of varicella vaccine among those without a reported history of disease.

To assess receipt of Td or Tdap vaccinations at ages 10–12 years, vaccination coverage was determined for ≥1 booster dose by the year in which adolescents reached age 13 years. Receipt of Td or Tdap vaccination increased from 22.7% (CI = 18.4–27.6) of children who reached age 13 years in 2002 to 41.7% (CI = 36.4–47.3) of children who reached age 13 years in 2006 (Figure).

Reported by: N Jain, MD, S Stokley, MPH, Immunization Svcs Div, National Center for Immunization and Respiratory Diseases, CDC.

Editorial Note: This is the first report of national adolescent vaccination-coverage estimates based on provider-reported vaccination histories. The results indicate that in 2006, the *Healthy People 2010* target for adolescents aged

FIGURE. Estimated Td* or Tdap† vaccination coverage,§ by year in which adolescent reached thirteenth birthday — National Immunization Survey — Teen, United States, 2006



*Tetanus toxoid and diphtheria.

†Tetanus toxoid, reduced diphtheria toxoid, and acellular pertussis.

§≥1 booster dose of vaccine by age 13 years.

13–15 years had not been met for any of the vaccines. Before development of NIS-Teen, national estimates of adolescent vaccination coverage were determined primarily from data collected from the National Health Interview Survey (NHIS), which is based on parental recall rather than provider records. Based on data from the 2003 NHIS, coverage with ≥2 doses of MMR and ≥1 dose of Td vaccine among adolescents ages 13–15 years was estimated at >90% (3), higher than the coverage estimates described in this report. Although the reliability of parental recall of adolescent vaccinations has not been studied, studies evaluating parental recall of infant vaccinations have indicated that parents do not accurately recall childhood vaccinations (6,7), emphasizing the need for provider-reported data.

Coverage levels among adolescents must be considered in the context of vaccination programs that existed when the adolescents reached the recommended ages for each vaccine. For example, adolescents aged 13–14 years were born primarily during 1992–1993, or 1–2 years after ACIP recommendations for universal vaccination of infants with hepatitis B vaccine; adolescents aged 15–17 years were born before this recommendation and therefore might be expected to have lower coverage. Although many states have hepatitis B vaccination requirements for middle-school entry, results from NIS-Teen suggest that many older adolescents have not received the vaccination. Therefore, providers should continue to review the vaccination status of adolescent patients to ensure they are fully vaccinated. CDC will conduct additional analyses to better characterize the impact of vaccination programs on adolescent vaccination coverage.

During 2002–2006, an increasing percentage of children were receiving Td or Tdap by age 13 years, as recommended by ACIP; however, overall coverage (60.1%) remained low, and coverage among adolescents aged 13–15 years (56.7%) was still below the national objective of 90%. Tdap coverage alone was low (10.8%), although a low level was expected because Tdap recommendations were published only 1–2 years before this survey was conducted. The lower Tdap vaccination coverage among older adolescents (aged 16–17 years) compared with younger adolescents (aged 13–15 years) might be a result of the time interval required between Td and Tdap vaccinations; Td vaccination coverage increased with age, and a 5-year interval is recommended before administering Tdap vaccine. Alternately, the higher Tdap coverage among younger adolescents might be a reflection of health-care use patterns; younger adolescents are more likely to have preventive health-care visits, when vaccinations are typically administered, than older adolescents (8).

The findings in this report are subject to at least four limitations. First, because NIS-Teen is a telephone survey, adjustments were made for nonresponse and for households without landline telephones; however, some bias might remain. Second, NIS-Teen uses provider-reported vaccination histories and assumes that coverage among adolescents for whom adequate provider data were not available is similar to coverage among adolescents for whom adequate provider data were available, controlling for factors associated with vaccination coverage; this might have resulted in an underestimation or overestimation of vaccination coverage. Third, certain provider-reported vaccination records might not have included all vaccinations received (e.g., vaccinations administered in nontraditional settings such as emergency departments), which might have resulted in an underestimation of vaccination coverage. Finally, the response rates were low (56.2% household response rate and 52.7% response rate for provider-vaccination records from responding households).

Vaccinating adolescents presents numerous challenges. Adolescents do not frequently seek preventive health-care services, some do not have health insurance, and some visit multiple health-care providers and nontraditional providers who vary in vaccination practices (8,9). Routine health-care visits should be encouraged for all adolescents, with an emphasis on the visit at ages 11–12 years as recommended by ACIP, AAP, AAAP, and AMA (2). During this visit, vaccinations and other evidence-based preventive services should be provided. In addition, adolescents aged 13–18 years should be vaccinated with recommended vaccines

at the earliest opportunity. CDC will continue annual monitoring of adolescent vaccination coverage among different age groups. Future analyses will assess coverage by race/ethnicity and other sociodemographic factors to identify barriers to vaccination. To increase the ascertainment of provider-reported vaccinations, the 2007 NIS-Teen includes new questions for parents or guardians on vaccinations their adolescents received from providers other than traditional health-care providers. In addition, the survey will be expanded in 2008 to produce state-level estimates that will provide information on the effects of additional factors on adolescent coverage, including vaccine financing and state mandates.

References

1. CDC. Recommended immunization schedules for persons aged 0–18 years—United States, 2007. *MMWR* 2007;55(51&52):Q1–4.
2. CDC. Immunization of adolescents: recommendations of the Advisory Committee on Immunization Practices, the American Academy of Pediatrics, the American Academy of Family Physicians, and the American Medical Association. *MMWR* 1996;45(No. RR-13):1–16.
3. CDC. Data2010. The Healthy People 2010 database. Available at <http://wonder.cdc.gov/data2010/obj.htm>.
4. Smith PJ, Battaglia MP, Huggins VJ, et al. Overview of the sampling design and statistical methods used in the National Immunization Survey. *Am J Prev Med* 2001;20(4 Suppl):S17–24.
5. Smith PJ, Hoaglin DC, Battaglia MP, et al. Statistical methodology of the National Immunization Survey, 1994–2002. *Vital Health Stat* 2005;2(138). Available at http://www.cdc.gov/nchs/data/series/sr_02/sr02_138.pdf.
6. Bolton P, Holt E, Ross A, Hughart N, Gyer B. Estimating vaccination coverage using parental recall, vaccination cards, and medical records. *Public Health Rep* 1998;113:521–6.
7. Zell ER, Peak RR, Rodewald LE, Ezzati-Rice TM [Letter]. Vaccine coverage. *Public Health Rep* 1999;114:3–4.
8. Rand CM, Shone LP, Albertin C, Auinger P, Klein JD, Szilagyi PG. National health care visit patterns of adolescents: implications for delivery of new adolescent vaccines. *Arch Pediatr Adolesc Med* 2007;161:252–9.
9. Bloom B, Dey AN, Freeman G. Summary health statistics for U.S. children: National Health Interview Survey, 2005. *Vital Health Stat* 2006;10(231):1–84.

Notice to Readers

Sickle Cell Disease Awareness Month — September 2007

Sickle cell disease is a genetic blood disorder that most commonly affects persons whose ancestors come from Africa, South or Central America (especially Panama), Caribbean islands, Mediterranean countries (e.g., Turkey, Greece, and Italy), India, and Saudi Arabia (1). Approximately 70,000 persons in the United States (primarily black or Hispanic) have sickle cell disease. In addition, approximately 2 million persons have sickle cell trait and can have children with sickle cell trait or sickle cell disease (1).

September is Sickle Cell Disease Awareness Month. In recognition, CDC is sponsoring activities to increase awareness and knowledge of the disease, including three public science seminars in September. Additional information about sickle cell disease and the science seminars is available at <http://www.cdc.gov/ncbddd/sicklecell>.

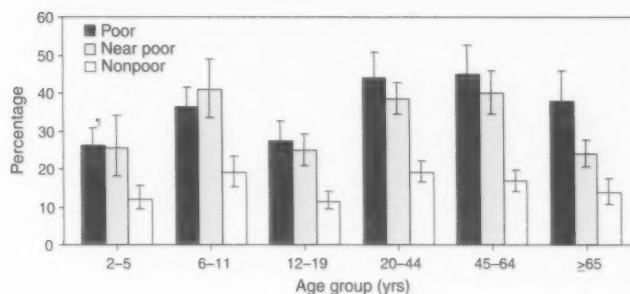
Reference

1. National Heart, Lung, and Blood Institute. Diseases and conditions index. Sickle cell anemia: who is at risk? Bethesda, MD: US Department of Health and Human Services, National Institutes of Health, National Heart, Lung, and Blood Institute; 2007. Available at http://www.nhlbi.nih.gov/health/dci/Diseases/Sca/SCA_WhoIsAtRisk.html.

QuickStats

FROM THE NATIONAL CENTER FOR HEALTH STATISTICS

Percentage of Persons with Untreated Dental Caries,* by Age Group† and Poverty Status§ — National Health and Nutrition Examination Survey (NHANES), United States, 2001–2004



* As determined by NHANES dental examination; excludes persons who are edentulous.

† Persons aged 2–5 years: primary teeth only; 6–11 years: both primary and secondary teeth; ≥12 years: secondary teeth only.

§ Poor is defined as having an annual family income <100% of the relevant U.S. Census poverty threshold, near poor as 100% to <200% of the threshold, and nonpoor as ≥200% of the threshold. In 2004, for a family of four (two adults and two children aged <18 years), the poverty threshold was \$19,157, and poverty status levels were as follows: poor, <\$19,157; near poor, \$19,157–\$38,314; and nonpoor, >\$38,314.

¶ 95% confidence interval.

During 2001–2004, poor persons were at least twice as likely as nonpoor persons to have untreated dental caries, regardless of age group. In each age group, persons categorized as near poor also were more likely than nonpoor persons to have untreated caries.

SOURCE: CDC. Health data for all ages. National Health and Nutrition Examination Survey, 2001–2004. Available at http://www.cdc.gov/nchs/health_data_for_all_ages.htm.

TABLE 1. Provisional cases of infrequently reported notifiable diseases (<1,000 cases reported during the preceding year) — United States, week ending August 25, 2007 (34th Week)*

Disease	Current week	Cum 2007	5-year weekly average [†]	Total cases reported for previous years					States reporting cases during current week (No.)
				2006	2005	2004	2003	2002	
Anthrax	—	—	—	1	—	—	—	2	
Botulism:									
foodborne	3	12	1	20	19	16	20	28	OH (3)
infant	—	53	2	97	85	87	76	69	
other (wound & unspecified)	2	15	1	48	31	30	33	21	CA (2)
Brucellosis	2	81	2	121	120	114	104	125	FL (1), CA (1)
Chancroid	—	19	1	33	17	30	54	67	
Cholera	—	1	0	9	8	5	2	2	
Cyclosporiasis [‡]	2	67	4	136	543	171	75	156	FL (1), TX (1)
Diphtheria	—	—	—	—	—	—	1	1	
Domestic arboviral diseases ^{§,¶} :									
California serogroup	—	10	7	67	80	112	108	164	
eastern equine	—	1	1	8	21	6	14	10	
Powassan	—	—	0	1	1	1	—	1	
St. Louis	—	2	2	10	13	12	41	28	
western equine	—	—	—	—	—	—	—	—	
Ehrlichiosis [§] :									
human granulocytic	13	219	15	646	786	537	362	511	NY (4), MN (8), MO (1)
human monocytic	15	273	13	578	506	338	321	216	NY (2), MN (3), MO (1), NC (3), TN (1), AL (1), AR (4)
human (other & unspecified)	2	80	3	231	112	59	44	23	MO (1), AR (1)
Haemophilus influenzae [¶] :									
invasive disease (age <5 yrs):									
serotype b	—	8	0	29	9	19	32	34	
nonserotype b	2	61	2	175	135	135	117	144	FL (2)
unknown serotype	2	167	3	179	217	177	227	153	OH (1), SC (1)
Hansen disease [§]	—	31	1	66	87	105	95	96	
Hantavirus pulmonary syndrome [§]	—	18	0	40	26	24	26	19	
Hemolytic uremic syndrome, postdiarrheal [§]	4	115	7	288	221	200	178	216	CT (2), NC (1), CA (1)
Hepatitis C viral, acute	8	414	22	802	652	713	1,102	1,835	NY (2), PA (1), OH (1), KY (2), OK (1), TX (1)
HIV infection, pediatric (age <13 yrs) ^{††}	—	—	2	52	380	436	504	420	
Influenza-associated pediatric mortality ^{§§}	—	71	0	43	45	—	N	N	
Listeriosis	13	382	21	875	896	753	696	665	OH (4), IN (2), KS (2), VA (1), NC (2), AL (1), TX (1)
Measles ^{¶¶}	1	22	1	55	66	37	56	44	PA (1)
Meningococcal disease, invasive ^{¶¶} :									
A, C, Y, & W-135	—	175	3	318	297	—	—	—	
serogroup B	—	86	1	193	156	—	—	—	
other serogroup	—	15	0	32	27	—	—	—	
unknown serogroup	9	424	9	651	765	—	—	—	PA (1), FL (2), AZ (1), OR (2), CA (3)
Mumps	—	540	10	6,584	314	258	231	270	
Novel influenza A virus infections	—	—	—	N	N	N	N	N	
Plague	—	4	0	17	8	3	1	2	
Poliomyelitis, paralytic	—	—	—	—	1	—	—	—	
Poliovirus infection, nonparalytic [§]	—	—	—	N	N	N	N	N	
Psittacosis [§]	—	4	0	21	16	12	12	18	
Q fever [§]	—	106	2	169	136	70	71	61	
Rabies, human	—	—	0	3	2	7	2	3	
Rubella ^{†††}	1	10	0	11	11	10	7	18	AZ (1)
Rubella, congenital syndrome	—	—	—	1	1	—	1	1	
SARS-CoV ^{§§§}	—	—	—	—	—	—	8	N	
Smallpox [§]	—	—	—	—	—	—	—	—	
Streptococcal toxic-shock syndrome [§]	—	73	1	125	129	132	161	118	
Syphilis, congenital (age <1 yr)	1	245	7	380	329	353	413	412	WA (1)
Tetanus	—	9	1	41	27	34	20	25	
Toxic-shock syndrome (staphylococcal) [§]	—	48	2	101	90	95	133	109	
Trichinellosis	—	5	0	15	16	5	6	14	
Tularemia	4	75	4	95	154	134	129	90	TN (1), AR (2), TX (1)
Typhoid fever	2	172	9	353	324	322	356	321	OH (1), FL (1)
Vancomycin-intermediate <i>Staphylococcus aureus</i> [§]	—	6	—	6	2	—	N	N	
Vancomycin-resistant <i>Staphylococcus aureus</i> [§]	—	—	—	1	3	1	N	N	
Vibriosis (noncholera <i>Vibrio</i> species infections) [§]	13	175	8	N	N	N	N	N	NY (3), OH (1), MD (1), GA (1), FL (6), CA (1)
Yellow fever	—	—	—	—	—	—	—	1	

—: No reported cases. N: Not notifiable. Cum: Cumulative year-to-date counts.

* Incidence data for reporting years 2006 and 2007 are provisional, whereas data for 2002, 2003, 2004, and 2005 are finalized.

† Calculated by summing the incidence counts for the current week, the 2 weeks preceding the current week, and the 2 weeks following the current week, for a total of 5 preceding years. Additional information is available at <http://www.cdc.gov/epo/dphsi/phs/files/5yearweeklyaverage.pdf>.§ Not notifiable in all states. Data from states where the condition is not notifiable are excluded from this table, except in 2007 for the domestic arboviral diseases and influenza-associated pediatric mortality, and in 2003 for SARS-CoV. Reporting exceptions are available at <http://www.cdc.gov/epo/dphsi/phs/infdis.htm>.

¶ Includes both neuroinvasive and nonneuroinvasive. Updated weekly from reports to the Division of Vector-Borne Infectious Diseases, National Center for Zoonotic, Vector-Borne, and Enteric Diseases (ArboNET Surveillance). Data for West Nile virus are available in Table II.

¶¶ Data for *H. influenzae* (all ages, all serotypes) are available in Table II.

†† Updated monthly from reports to the Division of HIV/AIDS Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention. Implementation of HIV reporting influences the number of cases reported. Updates of pediatric HIV data have been temporarily suspended until upgrading of the national HIV/AIDS surveillance data management system is completed. Data for HIV/AIDS, when available, are displayed in Table IV, which appears quarterly.

§§ Updated weekly from reports to the Influenza Division, National Center for Immunization and Respiratory Diseases. A total of 68 cases were reported for the 2006–07 flu season.

¶¶ The one measles case reported for the current week was indigenous.

*** Data for meningococcal disease (all serogroups) are available in Table II.

††† The one rubella case reported for the current week was unknown.

§§§ Updated weekly from reports to the Division of Viral and Rickettsial Diseases, National Center for Zoonotic, Vector-Borne, and Enteric Diseases.

TABLE II. Provisional cases of selected notifiable diseases, United States, weeks ending August 25, 2007, and August 26, 2006 (34th Week)*

Reporting area	Chlamydia [†]					Coccidioidomycosis					Cryptosporidiosis				
	Current week	Previous 52 weeks		Cum 2007	Cum 2006	Current week	Previous 52 weeks		Cum 2007	Cum 2006	Current week	Previous 52 weeks		Cum 2007	Cum 2006
		Med	Max				Med	Max				Med	Max		
United States	12,350	20,619	25,327	658,215	657,905	82	124	658	4,281	5,562	469	76	335	3,393	2,745
New England	459	713	1,357	22,369	20,778	—	0	1	2	—	1	4	27	139	219
Connecticut	—	223	829	6,647	5,993	N	0	0	N	N	—	0	21	21	38
Maine [‡]	41	48	74	1,651	1,453	—	0	0	—	—	—	1	6	28	22
Massachusetts	294	310	600	10,142	9,249	—	0	0	—	—	—	1	19	36	99
New Hampshire	58	40	70	1,372	1,218	—	0	1	2	—	—	1	4	31	26
Rhode Island [§]	62	66	108	2,043	2,076	—	0	0	—	—	—	0	5	5	6
Vermont [‡]	4	19	45	514	789	N	0	0	N	N	1	1	4	18	28
Mid. Atlantic	1,798	2,642	4,284	92,006	80,445	—	0	0	—	—	40	10	105	611	357
New Jersey	238	403	525	12,731	13,041	N	0	0	N	N	—	0	5	9	25
New York (Upstate)	561	505	2,758	16,597	15,262	N	0	0	N	N	10	3	15	108	83
New York City	417	875	1,686	30,252	26,304	N	0	0	N	N	—	1	10	38	84
Pennsylvania	582	797	1,798	32,426	25,838	N	0	0	N	N	30	4	101	456	165
E.N. Central	1,315	3,154	6,305	106,339	109,953	1	0	3	19	32	38	16	91	548	747
Illinois	728	1,011	1,345	31,178	35,239	—	0	0	—	—	—	2	19	64	133
Indiana	336	385	644	13,331	13,185	—	0	0	—	—	8	1	18	51	39
Michigan	—	734	1,225	22,304	21,663	—	0	3	13	28	—	3	10	96	80
Ohio	81	651	3,653	27,175	26,377	1	0	2	6	4	30	5	26	174	203
Wisconsin	170	373	528	12,351	13,489	N	0	0	N	N	—	5	42	163	292
W.N. Central	690	1,199	1,448	38,246	40,090	—	0	54	3	—	30	11	77	514	443
Iowa	106	163	253	5,552	5,409	N	0	0	N	N	5	2	34	180	95
Kansas	222	147	294	5,326	5,334	N	0	0	N	N	4	1	8	50	50
Minnesota	—	236	314	6,759	8,365	—	0	54	—	—	13	3	25	110	109
Missouri	362	453	628	14,943	14,777	—	0	1	3	—	8	1	21	51	90
Nebraska [‡]	—	105	183	3,122	3,361	N	0	0	N	N	—	1	16	46	46
North Dakota	—	30	69	957	1,132	N	0	0	N	N	—	0	11	8	6
South Dakota	—	49	84	1,587	1,712	N	0	0	N	N	—	2	7	69	47
S. Atlantic	3,379	3,925	6,760	129,366	126,096	—	0	1	2	3	42	21	70	549	507
Delaware	57	67	140	2,289	2,330	—	0	0	—	—	—	0	3	6	7
District of Columbia	99	97	167	3,754	1,938	—	0	0	—	—	—	0	2	3	11
Florida	1,438	1,067	1,769	37,006	31,856	N	0	0	N	N	32	10	32	288	199
Georgia	5	663	3,822	15,424	23,137	N	0	0	N	N	5	4	17	98	142
Maryland [§]	369	406	697	13,011	13,627	—	0	1	2	3	—	0	2	18	12
North Carolina	121	596	1,234	18,362	22,054	—	0	0	—	—	1	1	11	52	53
South Carolina [‡]	797	467	3,030	21,690	13,862	N	0	0	N	N	2	1	14	42	55
Virginia [‡]	463	490	685	15,941	15,390	N	0	0	N	N	2	1	5	37	24
West Virginia	30	55	84	1,889	1,902	N	0	0	N	N	—	0	3	5	4
E.S. Central	1,071	1,390	2,044	43,621	50,468	—	0	0	—	—	22	3	26	176	88
Alabama [‡]	—	321	539	7,299	15,424	N	0	0	N	N	3	1	12	38	28
Kentucky	222	120	691	4,917	6,108	N	0	0	N	N	14	1	13	88	27
Mississippi	350	355	959	13,485	12,580	N	0	0	N	N	—	0	8	14	9
Tennessee [‡]	499	509	695	17,920	16,356	N	0	0	N	N	5	1	7	36	24
W.S. Central	1,951	2,297	3,028	77,728	73,825	—	0	1	1	1	5	5	45	154	158
Arkansas [‡]	256	168	337	5,540	5,107	N	0	0	N	N	—	0	3	6	13
Louisiana	133	356	855	12,555	11,722	—	0	1	1	1	—	1	9	31	50
Oklahoma	419	282	467	8,745	7,370	N	0	0	N	N	5	1	13	57	23
Texas [‡]	1,143	1,482	1,911	50,888	49,626	N	0	0	N	N	—	2	36	60	72
Mountain	233	1,327	2,026	38,575	43,482	70	77	293	2,428	3,905	290	5	92	633	171
Arizona	103	483	993	13,629	13,703	70	73	293	2,333	3,804	—	0	6	23	19
Colorado	—	257	416	6,075	10,544	N	0	0	N	N	—	1	10	54	32
Idaho [‡]	—	56	253	2,242	1,959	N	0	0	N	N	18	0	5	37	10
Montana [‡]	—	50	82	1,488	1,653	N	0	0	N	N	—	1	25	34	51
Nevada [‡]	—	185	397	5,935	4,875	—	1	5	38	44	—	0	3	6	6
New Mexico [‡]	—	159	396	4,943	6,590	—	0	2	16	15	—	1	6	43	22
Utah	118	102	209	3,485	3,186	—	1	4	38	40	270	0	72	412	8
Wyoming [‡]	12	24	38	778	972	—	0	1	3	2	2	0	11	24	23
Pacific	1,454	3,375	4,362	109,965	112,768	11	50	311	1,826	1,621	1	1	9	69	55
Alaska	86	87	157	2,854	2,855	N	0	0	N	N	—	0	2	3	4
California	1,218	2,684	3,627	87,986	88,297	11	50	311	1,826	1,621	—	0	0	—	—
Hawaii	—	103	129	3,308	3,795	N	0	0	N	N	—	0	1	—	4
Oregon [‡]	—	160	394	5,592	6,155	N	0	0	N	N	1	1	9	66	47
Washington	150	333	621	10,225	11,666	N	0	0	N	N	—	0	0	—	—
American Samoa	U	0	32	U	U	U	0	0	U	U	U	0	0	U	U
C.N.M.I.	U	—	—	U	U	U	—	—	U	U	U	—	—	U	U
Guam	—	9	72	129	590	—	0	0	—	—	—	0	0	—	—
Puerto Rico	152	118	547	5,080	3,149	N	0	0	N	N	N	0	0	N	N
U.S. Virgin Islands	U	3	7	U	U	U	0	0	U	U	U	0	0	U	U

C.N.M.I.: Commonwealth of Northern Mariana Islands.

U: Unavailable. —: No reported cases. N: Not notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.

* Incidence data for reporting years 2006 and 2007 are provisional. Data for HIV/AIDS, AIDS, and TB, when available, are displayed in Table IV, which appears quarterly.

† Chlamydia refers to genital infections caused by *Chlamydia trachomatis*.

‡ Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending August 25, 2007, and August 26, 2006 (34th Week)*

Reporting area	Giardiasis					Gonorrhea					Haemophilus influenzae, invasive All ages, all serotypes†				
	Current week	Previous 52 weeks		Cum 2007	Cum 2006	Current week	Previous 52 weeks		Cum 2007	Cum 2006	Current week	Previous 52 weeks		Cum 2007	Cum 2006
		Med	Max				Med	Max				Med	Max		
United States	245	297	1,514	9,320	10,630	4,808	6,705	8,941	213,009	227,896	19	45	184	1,497	1,545
New England	12	24	67	697	822	54	114	259	3,580	3,546	—	3	19	118	121
Connecticut	—	5	25	188	159	—	47	204	1,337	1,401	—	0	6	31	35
Maine‡	10	3	12	107	91	4	2	8	88	82	—	0	2	7	15
Massachusetts	—	9	24	271	390	33	51	96	1,742	1,572	—	2	6	58	52
New Hampshire	—	0	3	13	19	6	3	8	104	133	—	0	2	13	8
Rhode Island‡	—	0	17	31	67	9	8	18	271	309	—	0	10	7	4
Vermont‡	2	3	12	67	96	2	1	5	38	49	—	0	1	2	7
Mid. Atlantic	60	55	127	1,686	2,132	514	717	1,537	24,150	21,198	—	10	27	321	321
New Jersey	—	6	17	142	321	98	114	159	3,708	3,442	—	1	5	46	57
New York (Upstate)	42	24	108	642	708	149	112	1,035	4,016	3,958	—	3	15	91	99
New York City	1	16	32	497	619	75	192	376	6,470	6,419	—	2	6	62	60
Pennsylvania	17	14	34	405	484	192	247	613	9,956	7,379	—	3	10	122	105
E.N. Central	27	44	99	1,268	1,725	512	1,232	2,613	42,397	44,636	8	5	15	188	258
Illinois	—	10	23	283	444	257	359	508	11,251	13,142	—	1	6	45	78
Indiana	N	0	0	N	N	157	159	306	5,639	5,748	5	1	10	42	50
Michigan	—	13	38	359	437	—	294	880	9,212	8,592	—	0	5	20	22
Ohio	27	15	32	456	489	37	274	1,568	12,025	12,661	3	2	5	72	58
Wisconsin	—	7	27	170	355	61	132	181	4,270	4,493	—	0	4	9	50
W.N. Central	23	20	553	574	1,181	241	383	512	12,323	12,463	—	3	24	85	93
Iowa	1	5	16	145	179	14	39	62	1,213	1,162	—	0	1	1	1
Kansas	3	3	9	90	127	73	44	86	1,532	1,465	—	0	2	9	14
Minnesota	—	0	514	12	414	—	60	67	1,764	2,089	—	1	17	35	47
Missouri	19	7	28	219	312	154	200	266	6,711	6,573	—	1	5	26	22
Nebraska‡	—	2	9	61	76	—	28	57	885	850	—	0	2	12	5
North Dakota	—	0	16	11	12	—	2	7	59	76	—	0	2	2	4
South Dakota	—	1	6	36	61	—	6	15	159	248	—	0	0	—	—
S. Atlantic	53	57	106	1,698	1,591	1,790	1,634	3,209	50,365	56,207	6	11	34	382	385
Delaware	—	1	3	24	26	20	28	44	900	959	—	0	3	5	1
District of Columbia	—	0	7	34	45	36	45	72	1,514	1,136	—	0	2	3	3
Florida	27	24	44	782	648	578	471	717	15,344	15,721	2	3	8	115	120
Georgia	4	12	31	340	381	3	303	2,068	6,275	11,237	2	2	7	73	81
Maryland‡	4	4	12	151	143	115	130	227	4,107	4,681	—	2	6	61	50
North Carolina	—	0	0	—	—	571	283	675	8,564	11,370	—	0	9	43	44
South Carolina‡	4	2	8	61	69	321	199	1,361	9,239	6,436	1	1	4	36	27
Virginia‡	14	10	28	286	262	133	123	236	3,853	4,109	—	1	6	28	44
West Virginia	—	0	21	20	17	13	18	44	569	558	1	0	6	18	15
E.S. Central	6	9	21	299	265	451	537	752	16,612	20,511	—	2	9	87	80
Alabama‡	4	4	16	147	122	—	141	242	3,283	7,172	—	0	3	18	17
Kentucky	N	0	0	N	N	98	43	268	1,851	2,171	—	0	1	2	5
Mississippi	N	0	0	N	N	129	148	310	5,053	4,875	—	0	1	6	10
Tennessee‡	2	5	16	152	143	224	194	239	6,425	6,293	—	2	6	61	48
W.S. Central	4	7	56	214	191	794	980	1,490	32,219	32,411	2	1	34	73	61
Arkansas‡	1	3	13	68	68	89	79	142	2,552	2,716	—	0	2	5	8
Louisiana	—	2	6	59	53	91	219	384	7,288	7,020	—	0	3	5	13
Oklahoma	3	3	43	87	70	172	99	235	3,335	2,763	2	1	29	59	34
Texas‡	N	0	0	N	N	442	575	938	19,044	19,912	—	0	3	4	6
Mountain	24	30	67	910	1,000	53	254	454	7,511	9,670	3	4	11	161	154
Arizona	3	3	11	100	99	35	109	220	2,879	3,423	1	1	6	56	64
Colorado	—	10	26	281	332	—	57	93	1,487	2,397	—	1	4	40	40
Idaho‡	8	3	12	105	110	—	3	20	161	112	—	0	1	4	3
Montana‡	—	2	10	57	57	—	2	8	50	137	—	0	0	—	—
Nevada‡	—	2	8	75	78	—	48	135	1,473	1,742	—	0	2	9	10
New Mexico‡	—	2	6	62	46	—	28	52	882	1,215	—	0	3	24	21
Utah	13	7	27	206	257	17	18	34	531	555	2	0	3	26	13
Wyoming‡	—	1	4	24	21	1	2	5	48	89	—	0	1	2	3
Pacific	36	60	558	1,974	1,723	399	726	900	23,852	27,254	—	2	16	82	72
Alaska	2	1	17	40	37	15	10	27	306	381	—	0	2	8	9
California	26	43	93	1,360	1,389	362	612	768	20,552	22,442	—	0	10	20	23
Hawaii	—	1	4	46	37	—	12	23	388	664	—	0	2	6	12
Oregon‡	8	8	14	264	260	—	23	46	651	957	—	1	6	46	28
Washington	—	3	449	264	—	22	66	142	1,955	2,810	—	0	5	2	—
American Samoa	U	0	0	U	U	U	0	2	U	U	U	0	0	U	U
C.N.M.I.	U	—	—	U	U	U	—	—	U	U	U	—	—	U	U
Guam	—	0	0	—	—	—	1	7	22	79	—	0	0	—	1
Puerto Rico	—	6	19	131	125	9	6	23	231	203	—	0	2	2	1
U.S. Virgin Islands	U	0	0	U	U	U	1	3	U	U	U	0	0	U	U

C.N.M.I.: Commonwealth of Northern Mariana Islands.

U: Unavailable. —: No reported cases. N: Not notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.

* Incidence data for reporting years 2006 and 2007 are provisional.

† Data for *H. influenzae* (age <5 yrs for serotype b, nonserotype b, and unknown serotype) are available in Table I.

‡ Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending August 25, 2007, and August 26, 2006 (34th Week)*

Reporting area	Hepatitis (viral, acute), by type [†]										Legionellosis				
	A					B									
	Current week	Previous 52 weeks		Cum 2007	Cum 2006	Current week	Previous 52 weeks		Cum 2007	Cum 2006	Current week	Previous 52 weeks		Cum 2007	Cum 2006
		Med	Max				Med	Max				Med	Max		
United States	35	54	201	1,675	2,268	44	77	406	2,457	2,824	46	42	109	1,211	1,479
New England	1	2	6	62	130	—	2	5	43	76	3	2	13	70	97
Connecticut	1	0	3	10	27	—	0	5	21	30	3	0	9	22	19
Maine [§]	—	0	1	2	7	—	0	2	2	15	—	0	1	2	6
Massachusetts	—	1	4	28	62	—	0	1	4	15	—	0	5	14	49
New Hampshire	—	0	3	10	20	—	0	1	5	7	—	0	2	4	8
Rhode Island [§]	—	0	2	8	8	—	0	4	10	8	—	0	6	23	12
Vermont [§]	—	0	1	4	6	—	0	1	1	1	—	0	2	5	3
Mid. Atlantic	9	7	20	246	235	4	8	21	280	346	14	12	55	370	485
New Jersey	—	2	5	56	72	—	2	7	53	110	—	1	10	33	63
New York (Upstate)	6	1	11	50	51	4	1	13	56	45	3	5	30	114	163
New York City	1	2	10	84	72	—	2	6	56	80	—	2	24	57	84
Pennsylvania	2	2	5	56	40	—	3	8	115	111	11	5	19	166	175
E.N. Central	3	5	17	163	204	3	9	23	275	336	10	8	27	236	332
Illinois	—	2	7	60	55	—	2	6	76	94	—	1	13	30	64
Indiana	1	0	7	9	16	—	0	21	29	34	—	1	6	21	27
Michigan	—	2	8	42	67	—	2	8	70	96	—	3	10	79	78
Ohio	2	1	4	45	39	3	2	10	88	86	10	3	12	98	134
Wisconsin	—	0	4	7	27	—	0	3	12	26	—	0	3	8	29
W.N. Central	1	2	18	104	92	1	2	15	78	99	3	1	8	49	54
Iowa	—	0	4	25	8	—	0	3	14	16	—	0	1	6	10
Kansas	—	0	1	2	22	1	0	1	6	8	—	0	1	2	5
Minnesota	—	0	17	49	9	—	0	13	14	12	1	0	6	15	11
Missouri	1	0	2	16	32	—	0	5	33	51	2	0	2	19	17
Nebraska [§]	—	0	2	7	12	—	0	3	8	8	—	0	1	4	7
North Dakota	—	0	3	—	—	—	0	1	—	—	—	0	1	—	—
South Dakota	—	0	1	5	9	—	0	1	3	4	—	0	1	3	4
S. Atlantic	8	10	27	326	341	17	20	56	634	792	10	7	25	225	269
Delaware	—	0	1	3	11	—	0	3	11	34	—	0	2	5	8
District of Columbia	—	0	5	14	5	—	0	2	1	5	—	0	4	1	14
Florida	2	3	11	94	130	2	7	14	229	268	7	2	9	92	106
Georgia	3	1	4	48	42	1	3	10	70	137	—	1	2	14	18
Maryland [§]	—	1	6	53	37	2	2	7	67	106	1	2	8	42	53
North Carolina	—	0	11	37	60	10	0	16	89	105	—	1	4	29	23
South Carolina [§]	—	0	4	12	15	—	1	5	42	58	—	0	2	11	3
Virginia [§]	3	1	5	60	37	—	3	8	92	36	1	1	4	26	37
West Virginia	—	0	1	5	4	2	0	23	33	43	1	0	4	5	7
E.S. Central	2	2	7	62	91	2	6	17	209	220	1	2	7	64	58
Alabama [§]	—	0	2	10	11	1	2	10	73	67	—	0	1	7	8
Kentucky	—	0	2	11	28	—	1	7	40	48	1	1	6	32	18
Mississippi	—	0	4	6	5	—	0	8	14	9	—	0	1	—	3
Tennessee [§]	2	1	5	35	47	1	3	8	82	96	—	1	4	25	29
W.S. Central	—	5	43	126	230	9	18	170	501	531	2	1	16	62	51
Arkansas [§]	—	0	2	8	39	—	1	7	37	45	—	0	3	4	4
Louisiana	—	1	4	19	14	—	1	4	50	41	—	0	1	3	10
Oklahoma	—	0	3	3	4	—	1	25	21	23	—	0	6	4	1
Texas [§]	—	4	39	96	173	9	14	135	393	422	2	1	13	51	36
Mountain	7	5	15	152	179	—	3	7	116	98	1	2	8	59	74
Arizona	6	3	11	105	98	—	0	3	40	—	1	0	4	18	24
Colorado	—	1	3	20	29	—	0	2	20	28	—	0	2	11	16
Idaho [§]	1	0	1	3	8	—	0	1	8	10	—	0	3	4	6
Montana [§]	—	0	3	6	9	—	0	3	—	—	—	0	1	3	4
Nevada [§]	—	0	2	8	9	—	1	3	27	25	—	0	2	6	4
New Mexico [§]	—	0	2	5	12	—	0	2	7	16	—	0	2	6	4
Utah	—	0	1	3	12	—	0	4	13	19	—	0	2	8	16
Wyoming [§]	—	0	1	2	2	—	0	1	1	—	—	0	1	3	—
Pacific	4	13	92	434	766	8	10	106	321	326	2	2	11	76	59
Alaska	—	0	1	3	1	—	0	3	4	3	—	0	1	—	—
California	4	10	40	377	725	8	7	31	240	266	2	1	11	58	59
Hawaii	—	0	2	4	10	—	0	1	2	5	—	0	1	1	—
Oregon [§]	—	1	2	21	30	—	1	5	43	52	—	0	1	6	—
Washington	—	0	52	29	—	—	0	74	32	—	—	0	2	11	—
American Samoa	U	0	0	U	U	U	0	0	U	U	U	0	0	U	U
C.N.M.I.	U	—	—	U	U	U	—	—	U	U	U	—	—	U	U
Guam	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Puerto Rico	—	1	10	38	43	—	1	9	41	42	—	0	2	3	1
U.S. Virgin Islands	U	0	0	U	U	U	0	0	U	U	U	0	0	U	U

C.N.M.I.: Commonwealth of Northern Mariana Islands.

U: Unavailable. —: No reported cases. N: Not notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.

* Incidence data for reporting years 2006 and 2007 are provisional.

† Data for acute hepatitis C, viral are available in Table I.

§ Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending August 25, 2007, and August 26, 2006 (34th Week)*

Reporting area	Lyme disease					Malaria					Meningococcal disease, invasive† All serogroups				
	Current week	Previous 52 weeks		Cum 2007	Cum 2006	Current week	Previous 52 weeks		Cum 2007	Cum 2006	Current week	Previous 52 weeks		Cum 2007	Cum 2006
		Med	Max				Med	Max				Med	Max		
United States	297	235	981	10,597	13,267	20	22	105	663	918	9	19	87	700	800
New England	92	39	274	1,979	3,179	—	1	5	29	39	—	1	3	32	33
Connecticut	90	12	214	1,239	1,325	—	0	3	1	10	—	0	1	6	9
Maine‡	—	3	41	148	57	—	0	1	5	3	—	0	3	5	3
Massachusetts	—	1	28	21	1,223	—	0	3	16	18	—	0	2	17	16
New Hampshire	2	7	62	494	509	—	0	4	6	7	—	0	1	—	3
Rhode Island‡	—	0	93	3	1	—	0	1	—	—	—	0	1	1	—
Vermont‡	—	1	10	74	64	—	0	1	1	1	—	0	1	3	2
Mid. Atlantic	151	133	487	5,624	6,715	—	6	18	154	224	1	2	8	98	130
New Jersey	1	26	67	961	1,952	—	0	5	—	66	—	0	2	11	16
New York (Upstate)	114	50	426	1,870	2,205	—	1	7	37	20	—	1	3	25	30
New York City	—	2	18	66	219	—	3	8	98	107	—	0	4	25	48
Pennsylvania	36	44	249	2,727	2,339	—	1	4	19	31	1	1	5	37	36
E.N. Central	—	6	34	194	1,481	2	2	10	64	103	—	3	9	90	116
Illinois	—	1	9	58	98	—	1	6	25	51	—	0	3	25	30
Indiana	—	0	5	24	19	—	0	2	5	9	—	0	4	17	17
Michigan	—	1	6	32	36	—	0	2	9	15	—	0	3	16	21
Ohio	—	0	4	10	35	2	0	2	17	20	—	1	3	24	32
Wisconsin	—	3	31	70	1,293	—	0	3	8	8	—	0	3	8	16
W.N. Central	4	4	195	279	330	—	0	12	22	30	—	1	5	40	46
Iowa	—	1	10	68	87	—	0	1	2	1	—	0	3	10	12
Kansas	—	0	2	9	3	—	0	1	2	5	—	0	1	1	2
Minnesota	3	1	188	180	230	—	0	12	11	14	—	0	3	12	10
Missouri	1	0	4	15	2	—	0	1	2	6	—	0	3	10	13
Nebraska‡	—	0	2	5	7	—	0	1	4	2	—	0	1	2	6
North Dakota	—	0	7	2	—	—	0	1	—	1	—	0	3	2	1
South Dakota	—	0	0	—	1	—	0	1	1	1	—	0	1	3	2
S. Atlantic	45	48	151	2,324	1,453	10	5	13	166	243	2	3	11	113	135
Delaware	8	10	34	497	361	—	0	1	4	5	—	0	1	1	4
District of Columbia	—	0	7	13	31	—	0	2	3	3	—	0	1	—	1
Florida	5	1	4	40	13	4	1	7	40	39	2	1	7	43	52
Georgia	—	0	1	1	7	2	0	5	22	71	—	0	3	12	10
Maryland‡	12	25	108	1,216	843	1	1	5	41	57	—	0	2	18	9
North Carolina	—	0	6	31	21	1	0	4	17	18	—	0	6	14	23
South Carolina‡	—	0	2	15	12	—	0	1	5	8	—	0	2	11	16
Virginia‡	20	10	60	472	158	2	1	3	32	40	—	0	2	12	15
West Virginia	—	0	14	39	7	—	0	1	2	2	—	0	2	2	5
E.S. Central	—	1	5	36	23	2	0	3	25	21	—	1	4	35	30
Alabama‡	—	0	3	9	7	1	0	2	5	8	—	0	2	6	4
Kentucky	—	0	2	3	3	1	0	1	6	3	—	0	2	7	7
Mississippi	—	0	0	—	3	—	0	1	1	5	—	0	4	9	4
Tennessee‡	—	0	4	24	10	—	0	2	13	5	—	0	2	13	15
W.S. Central	1	1	5	40	14	—	2	29	60	62	—	2	15	75	78
Arkansas‡	—	0	0	—	—	—	0	2	—	2	—	0	2	8	9
Louisiana	—	0	1	2	—	—	0	2	13	4	—	0	4	24	31
Oklahoma	—	0	0	—	—	—	0	3	5	7	—	0	4	14	8
Texas‡	1	1	5	38	14	—	1	25	42	49	—	0	11	29	30
Mountain	1	1	3	27	16	1	1	6	36	51	1	1	4	45	50
Arizona	1	0	1	2	5	—	0	3	5	17	1	0	2	9	13
Colorado	—	0	1	1	—	—	0	2	12	12	—	0	2	16	15
Idaho‡	—	0	2	7	2	—	0	2	2	—	—	0	1	3	3
Montana‡	—	0	1	1	—	—	0	1	3	2	—	0	1	1	3
Nevada‡	—	0	2	7	2	—	0	1	2	2	—	0	1	4	4
New Mexico‡	—	0	1	3	3	—	0	1	2	5	—	0	1	2	2
Utah	—	0	2	3	3	1	0	3	10	13	—	0	2	8	6
Wyoming‡	—	0	1	3	1	—	0	0	—	—	—	0	1	2	4
Pacific	3	2	16	94	56	5	3	45	107	145	5	4	48	172	182
Alaska	1	0	1	5	2	—	0	1	2	22	—	0	1	1	3
California	2	2	10	86	49	5	2	7	75	107	3	3	10	124	141
Hawaii	N	0	0	N	N	—	0	1	2	8	—	0	1	4	6
Oregon‡	—	0	1	3	5	—	0	3	12	8	2	0	3	26	32
Washington	—	0	8	—	—	—	0	43	16	—	—	0	43	17	—
American Samoa	U	0	0	U	U	U	0	0	U	U	U	0	0	—	—
C.N.M.I.	U	—	—	U	U	U	—	—	U	U	U	—	—	—	—
Guam	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Puerto Rico	N	0	0	N	N	—	0	1	2	—	—	0	1	6	6
U.S. Virgin Islands	U	0	0	U	U	U	0	0	U	U	U	0	0	—	—

C.N.M.I.: Commonwealth of Northern Mariana Islands.

U: Unavailable. —: No reported cases. N: Not notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.

* Incidence data for reporting years 2006 and 2007 are provisional.

† Data for meningococcal disease, invasive caused by serogroups A, C, Y, & W-135; serogroup B; other serogroup; and unknown serogroup are available in Table I.

‡ Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending August 25, 2007, and August 26, 2006 (34th Week)*

Reporting area	Pertussis					Rabies, animal					Rocky Mountain spotted fever				
	Current week	Previous 52 weeks		Cum 2007	Cum 2006	Current week	Previous 52 weeks		Cum 2007	Cum 2006	Current week	Previous 52 weeks		Cum 2007	Cum 2006
		Med	Max				Med	Max				Med	Max		
United States	81	176	1,479	5,336	9,073	65	93	171	3,005	3,525	47	32	211	1,062	1,342
New England	—	29	77	757	1,032	16	12	22	382	263	—	0	10	—	9
Connecticut	—	2	6	37	67	10	5	11	155	116	—	0	0	—	—
Maine [†]	—	2	15	40	59	—	2	8	51	65	—	0	0	—	—
Massachusetts	—	22	46	613	651	—	0	0	—	—	—	0	1	—	8
New Hampshire	—	2	9	36	145	—	1	4	32	26	—	0	0	—	1
Rhode Island [†]	—	0	31	4	28	1	0	3	26	17	—	0	9	—	—
Vermont [†]	—	1	9	27	82	5	2	13	118	39	—	0	0	—	—
Mid. Atlantic	12	26	155	755	1,136	—	13	44	503	326	—	1	6	36	63
New Jersey	—	2	16	79	200	—	0	0	—	—	—	0	1	4	31
New York (Upstate)	11	15	146	403	476	—	—	—	—	—	—	0	1	3	—
New York City	—	2	6	76	65	—	1	5	32	16	—	0	3	15	17
Pennsylvania	1	7	20	197	395	—	12	44	471	310	—	0	3	14	15
E.N. Central	21	34	80	984	1,340	15	2	30	204	114	1	1	4	28	50
Illinois	—	4	23	97	336	4	1	15	70	34	—	0	3	16	24
Indiana	1	1	45	42	144	—	0	1	8	8	1	0	2	5	5
Michigan	—	8	39	172	309	—	1	17	78	37	—	0	1	3	2
Ohio	20	14	54	474	394	11	0	8	48	35	—	0	2	4	18
Wisconsin	—	4	24	199	157	—	0	0	—	—	—	0	0	—	1
W.N. Central	15	14	151	428	853	4	5	17	184	222	4	3	12	123	135
Iowa	—	4	16	105	210	—	0	7	21	46	—	0	1	7	4
Kansas	2	3	14	99	178	—	2	8	89	55	—	0	1	1	—
Minnesota	13	0	119	103	136	2	0	5	20	31	—	0	2	1	1
Missouri	—	2	10	45	215	2	0	6	28	44	4	2	12	103	110
Nebraska [†]	—	1	4	29	75	—	0	0	—	—	—	0	2	8	20
North Dakota	—	0	18	4	20	—	0	6	13	15	—	0	0	—	—
South Dakota	—	0	6	43	19	—	0	2	13	31	—	0	1	3	—
S. Atlantic	8	19	163	615	720	24	40	63	1,308	1,560	17	13	67	562	752
Delaware	—	0	2	7	3	—	0	0	—	—	—	0	2	8	18
District of Columbia	—	0	2	2	3	—	0	0	—	—	—	0	1	1	1
Florida	3	4	18	158	141	—	0	28	87	176	—	0	4	12	9
Georgia	—	1	5	22	62	11	4	23	152	182	—	0	5	15	35
Maryland [†]	3	2	8	73	99	—	6	12	182	285	—	1	7	41	52
North Carolina	—	3	112	213	141	13	9	19	333	337	14	6	61	371	539
South Carolina [†]	1	2	9	54	115	—	2	11	46	106	—	1	7	41	29
Virginia [†]	1	2	17	74	133	—	13	31	462	405	3	2	9	71	66
West Virginia	—	0	19	12	23	—	1	8	46	69	—	0	1	2	3
E.S. Central	—	5	24	155	217	—	3	11	100	165	9	5	27	165	224
Alabama [†]	—	1	18	47	40	—	0	8	—	52	5	1	9	48	57
Kentucky	—	0	3	5	48	—	0	3	15	15	—	0	2	4	1
Mississippi	—	0	10	40	24	—	0	0	—	4	—	0	1	2	3
Tennessee [†]	—	2	7	63	105	—	2	7	85	94	4	3	22	111	163
W.S. Central	—	20	226	590	522	—	2	35	68	606	15	1	168	120	75
Arkansas [†]	—	2	17	112	58	—	0	5	23	24	15	0	53	56	34
Louisiana	—	0	2	14	21	—	0	1	—	3	—	0	1	2	1
Oklahoma	—	0	36	4	18	—	0	22	45	48	—	0	108	45	26
Texas [†]	—	17	174	460	425	—	0	34	—	531	—	0	7	17	14
Mountain	24	24	61	729	1,882	1	3	28	116	123	—	0	4	23	32
Arizona	—	6	13	152	384	—	2	10	77	91	—	0	2	3	7
Colorado	—	6	17	193	590	—	0	0	—	—	—	0	1	1	4
Idaho [†]	1	1	6	32	57	—	0	24	—	—	—	0	3	4	7
Montana [†]	—	1	7	32	91	—	0	3	12	12	—	0	1	1	2
Nevada [†]	—	0	5	9	56	—	0	2	2	3	—	0	0	—	—
New Mexico [†]	—	2	8	41	66	—	0	2	8	7	—	0	1	4	6
Utah	23	8	47	252	579	1	0	2	9	6	—	0	0	—	—
Wyoming [†]	—	1	5	18	59	—	0	2	8	4	—	0	2	10	6
Pacific	1	13	547	323	1,371	5	4	13	140	146	1	0	1	5	2
Alaska	—	1	8	37	57	—	0	6	35	14	N	0	0	N	N
California	—	5	167	99	1,149	5	3	12	99	120	1	0	1	3	—
Hawaii	—	0	2	14	79	N	0	0	N	N	N	0	0	N	N
Oregon [†]	1	1	11	57	86	—	0	3	6	12	—	0	1	2	2
Washington	—	1	377	116	—	—	0	0	—	—	N	0	0	N	N
American Samoa	U	0	0	U	U	U	0	0	U	U	U	0	0	U	U
C.N.M.I.	U	—	—	U	U	U	—	—	U	U	U	—	—	U	U
Guam	—	0	6	—	49	—	0	0	—	—	N	0	0	N	N
Puerto Rico	—	0	1	—	1	2	1	5	37	59	N	0	0	N	N
U.S. Virgin Islands	U	0	0	U	U	U	0	0	U	U	U	0	0	U	U

C.N.M.I.: Commonwealth of Northern Mariana Islands.

U: Unavailable. —: No reported cases. N: Not notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.

* Incidence data for reporting years 2006 and 2007 are provisional.

† Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending August 25, 2007, and August 26, 2006 (34th Week)*

Reporting area	Salmonellosis					Shiga toxin-producing <i>E. coli</i> (STEC) [†]					Shigellosis				
	Current week	Previous 52 weeks		Cum 2007	Cum 2006	Current week	Previous 52 weeks		Cum 2007	Cum 2006	Current week	Previous 52 weeks		Cum 2007	Cum 2006
		Med	Max				Med	Max				Med	Max		
United States	659	838	2,338	24,443	25,884	74	77	336	2,316	2,264	312	325	1,287	9,357	7,704
New England	—	36	262	1,334	1,572	2	3	40	149	214	—	4	25	136	206
Connecticut	—	0	267	267	503	—	0	35	35	75	—	0	22	22	67
Maine [‡]	—	3	14	75	81	—	0	4	20	26	—	0	5	13	3
Massachusetts	—	23	60	775	766	—	1	10	74	75	—	3	8	91	121
New Hampshire	—	3	15	109	130	—	0	3	8	20	—	0	2	4	4
Rhode Island [‡]	—	2	20	56	56	1	0	2	5	4	—	0	3	4	8
Vermont [‡]	—	2	6	52	36	1	0	3	7	14	—	0	2	2	3
Mid. Atlantic	64	99	186	3,135	3,310	13	8	63	238	286	8	12	47	403	644
New Jersey	—	12	41	281	725	—	1	20	14	88	—	1	5	33	251
New York (Upstate)	41	29	112	885	722	10	3	15	113	94	5	3	42	88	163
New York City	5	24	42	800	815	—	0	4	22	33	1	5	12	152	172
Pennsylvania	18	33	67	1,169	1,048	3	3	47	89	71	2	2	21	130	58
E.N. Central	60	101	180	3,347	3,622	11	9	63	280	346	113	32	85	1,268	851
Illinois	—	30	107	1,002	1,067	—	1	8	29	64	—	11	51	289	390
Indiana	28	15	55	456	500	1	1	8	43	46	7	2	17	66	87
Michigan	—	18	35	534	668	—	1	6	43	57	—	1	4	36	114
Ohio	32	25	65	856	777	9	2	18	87	88	106	6	68	728	104
Wisconsin	—	16	49	499	610	1	2	41	78	91	—	4	13	149	156
W.N. Central	26	49	102	1,634	1,648	8	12	45	402	400	14	43	156	1,264	1,042
Iowa	—	9	26	290	286	—	2	38	87	88	—	2	14	52	63
Kansas	7	7	20	253	227	—	0	4	32	18	—	1	10	18	80
Minnesota	6	14	44	435	408	6	4	26	152	109	1	5	24	162	76
Missouri	13	14	31	402	482	2	2	9	65	120	11	18	72	908	491
Nebraska [§]	—	4	11	133	130	—	1	11	45	36	—	1	14	14	92
North Dakota	—	0	23	22	18	—	0	12	1	2	—	0	127	5	30
South Dakota	—	2	11	99	97	—	0	5	20	27	2	4	30	105	210
S. Atlantic	376	219	401	6,424	6,393	12	15	37	420	346	103	87	174	3,079	1,739
Delaware	—	3	10	91	92	—	0	3	12	7	—	0	1	7	7
District of Columbia	—	0	4	16	39	—	0	1	1	1	—	0	5	4	9
Florida	118	85	176	2,525	2,654	2	2	8	97	56	68	46	76	1,654	794
Georgia	63	32	73	1,075	1,047	1	2	6	49	54	18	34	92	1,111	626
Maryland [‡]	21	15	33	523	455	2	2	10	64	58	3	2	9	72	82
North Carolina	108	29	130	896	851	3	2	24	84	61	—	1	14	49	103
South Carolina [§]	38	18	51	578	599	—	0	2	10	9	7	1	6	78	71
Virginia [§]	21	20	46	603	593	4	3	10	93	96	7	3	9	97	45
West Virginia	7	2	31	117	63	—	0	5	10	4	—	0	6	7	2
E.S. Central	31	55	136	1,619	1,641	5	4	25	168	179	26	21	89	940	412
Alabama [§]	6	14	78	474	463	—	0	18	52	15	3	8	67	361	117
Kentucky	9	9	23	339	282	1	1	8	51	51	21	3	32	250	160
Mississippi	—	9	101	293	435	—	0	2	2	6	—	3	76	206	52
Tennessee [§]	16	17	34	513	461	4	2	8	63	107	2	3	14	123	83
W.S. Central	21	86	595	2,250	2,815	—	4	73	112	126	19	39	655	1,015	1,100
Arkansas [§]	3	14	45	374	502	—	1	7	19	20	—	2	10	65	58
Louisiana	—	17	48	447	610	—	0	2	3	13	—	9	25	316	104
Oklahoma	18	8	103	291	278	—	0	17	14	10	2	3	63	72	71
Texas [§]	—	44	470	1,138	1,425	—	2	68	76	83	17	22	580	562	867
Mountain	25	45	90	1,408	1,697	12	8	34	306	298	19	18	84	514	688
Arizona	14	13	44	416	500	4	2	9	75	58	18	10	37	287	359
Colorado	—	10	21	337	452	—	1	9	52	75	—	3	15	68	119
Idaho [§]	3	3	8	86	116	6	2	16	88	52	—	0	2	8	13
Montana [§]	—	2	6	60	91	—	0	0	—	—	—	0	13	14	6
Nevada [§]	—	4	10	123	141	—	0	5	16	18	—	1	20	25	63
New Mexico [§]	1	5	12	149	171	—	1	4	23	28	—	2	15	66	88
Utah	7	4	14	187	191	2	1	14	52	57	1	1	4	17	36
Wyoming [§]	—	1	4	50	35	—	0	3	—	10	—	1	19	29	4
Pacific	56	109	890	3,292	3,186	11	5	164	241	69	10	29	256	738	1,022
Alaska	2	1	5	56	52	N	0	0	N	N	—	0	2	7	6
California	53	91	260	2,469	2,710	4	1	15	129	N	10	24	84	595	897
Hawaii	—	5	16	166	146	—	0	3	15	12	—	0	3	18	30
Oregon [§]	1	7	17	211	276	7	1	9	47	57	—	1	6	48	89
Washington	—	7	625	390	2	—	0	162	50	—	—	1	170	70	—
American Samoa	U	0	0	U	U	U	0	0	U	U	U	0	0	U	U
C.N.M.I.	U	—	—	U	U	U	—	—	U	U	U	—	—	U	U
Guam	—	0	0	—	—	N	0	0	N	N	—	0	0	—	—
Puerto Rico	1	14	66	379	328	—	0	0	—	—	—	0	4	17	32
U.S. Virgin Islands	U	0	0	U	U	U	0	0	U	U	U	0	0	U	U

C.N.M.I.: Commonwealth of Northern Mariana Islands.

U: Unavailable. —: No reported cases. N: Not notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.

* Incidence data for reporting years 2006 and 2007 are provisional.

† Includes *E. coli* O157:H7; Shiga toxin-positive, serogroup non-O157; and Shiga toxin-positive, not serogrouped.

§ Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending August 25, 2007, and August 26, 2006 (34th Week)*

Reporting area	Streptococcal disease, invasive, group A					Streptococcus pneumoniae, invasive disease, nondrug resistant†				
	Current week	Previous 52 weeks		Cum 2007	Cum 2006	Current week	Previous 52 weeks		Cum 2007	Cum 2006
		Med	Max				Med	Max		
United States	51	93	261	3,538	3,873	8	30	110	1,055	879
New England	—	6	27	287	254	—	3	11	76	72
Connecticut	—	0	23	91	68	—	0	6	—	23
Maine [§]	—	0	3	21	15	—	0	1	1	—
Massachusetts	—	3	12	131	128	—	2	6	58	42
New Hampshire	—	0	4	29	29	—	0	2	7	6
Rhode Island [§]	—	0	12	—	5	—	0	3	8	1
Vermont [§]	—	0	2	15	9	—	0	1	2	—
Mid. Atlantic	5	16	41	669	719	—	5	27	171	125
New Jersey	—	2	9	89	121	—	1	4	21	46
New York (Upstate)	3	5	27	225	233	—	2	15	76	65
New York City	—	4	13	157	131	—	1	25	74	14
Pennsylvania	2	5	11	198	234	N	0	0	N	N
E.N. Central	5	16	32	617	760	—	5	14	161	235
Illinois	—	4	13	158	230	—	1	6	38	62
Indiana	1	2	17	100	90	—	0	10	15	42
Michigan	—	4	10	152	160	—	1	4	55	54
Ohio	4	3	14	179	194	—	1	7	44	46
Wisconsin	—	1	6	28	86	—	0	2	9	31
W.N. Central	9	5	32	241	250	1	2	8	74	72
Iowa	—	0	0	—	—	—	0	0	—	—
Kansas	1	0	3	28	45	1	0	1	2	11
Minnesota	8	0	29	124	116	—	1	6	51	42
Missouri	—	2	6	53	51	—	0	2	13	11
Nebraska [§]	—	0	3	18	22	—	0	2	7	5
North Dakota	—	0	2	11	8	—	0	2	1	3
South Dakota	—	0	2	7	8	—	0	0	—	—
S. Atlantic	17	21	52	889	855	3	3	14	194	59
Delaware	—	0	2	7	9	—	0	0	—	—
District of Columbia	—	0	3	8	9	—	0	1	—	1
Florida	6	6	16	213	203	1	0	5	42	—
Georgia	4	5	13	169	179	—	0	5	44	—
Maryland [§]	3	4	10	160	159	—	1	6	46	48
North Carolina	2	0	22	128	126	—	0	0	—	—
South Carolina [§]	—	1	7	74	53	2	0	3	27	—
Virginia [§]	1	2	11	109	96	—	0	4	28	—
West Virginia	1	0	3	21	21	—	0	4	7	10
E.S. Central	2	4	13	161	158	—	1	6	62	15
Alabama [§]	N	0	0	N	N	N	0	0	N	N
Kentucky	—	1	3	32	38	—	0	0	—	—
Mississippi	N	0	0	N	N	—	0	2	3	15
Tennessee [§]	2	3	13	129	120	—	0	6	59	—
W.S. Central	7	6	90	231	292	2	4	45	152	147
Arkansas [§]	—	0	2	17	23	—	0	2	7	18
Louisiana	—	0	4	16	13	—	0	4	24	17
Oklahoma	3	1	23	56	74	—	1	15	37	31
Texas [§]	4	3	64	142	182	2	1	27	84	81
Mountain	5	9	20	349	511	2	4	12	141	139
Arizona	2	3	11	107	266	2	2	7	84	78
Colorado	—	3	9	115	89	—	1	4	32	36
Idaho [§]	1	0	2	11	7	—	0	1	2	1
Montana [§]	N	0	0	N	N	N	0	0	N	N
Nevada [§]	—	0	1	2	—	—	0	1	1	2
New Mexico [§]	1	1	5	37	96	—	0	4	18	22
Utah	1	2	7	72	50	—	0	2	4	—
Wyoming [§]	—	0	1	5	3	—	0	0	—	—
Pacific	1	3	9	94	74	—	1	4	24	15
Alaska	1	0	3	26	N	—	0	2	22	—
California	N	0	0	N	N	N	0	0	N	N
Hawaii	—	2	9	68	74	—	0	2	2	15
Oregon [§]	N	0	0	N	N	N	0	0	N	N
Washington	N	0	0	N	N	N	0	0	N	N
American Samoa	U	0	0	U	U	U	0	0	U	U
C.N.M.I.	U	—	—	U	U	U	—	—	U	U
Guam	—	0	0	—	—	N	0	0	N	N
Puerto Rico	—	0	0	—	—	N	0	0	N	N
U.S. Virgin Islands	U	0	0	U	U	U	0	0	U	U

C.N.M.I.: Commonwealth of Northern Mariana Islands.

U: Unavailable. —: No reported cases. N: Not notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.

† Incidence data for reporting years 2006 and 2007 are provisional.

§ Includes cases of invasive pneumococcal disease, in children aged <5 years, caused by *S. pneumoniae*, which is susceptible or for which susceptibility testing is not available (NNDSS event code 11717).

¶ Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending August 25, 2007, and August 26, 2006 (34th Week)*

Reporting area	<i>Streptococcus pneumoniae</i> , invasive disease, drug resistant†										Syphilis, primary and secondary				
	All ages					Age <5 years					Previous 52 weeks				
	Previous 52 weeks			Cum 2007	Cum 2006	Previous 52 weeks			Cum 2007	Cum 2006	Previous 52 weeks			Cum 2007	Cum 2006
	Current week	Med	Max			Current week	Med	Max			Current week	Med	Max		
United States	22	47	256	1,575	1,696	5	8	35	282	258	150	198	310	6,440	6,100
New England	1	1	12	35	94	—	0	3	6	2	—	4	13	153	139
Connecticut	—	0	5	—	71	—	0	0	—	—	—	1	10	22	29
Maine‡	—	0	2	9	6	—	0	2	1	1	—	0	2	5	7
Massachusetts	—	0	0	—	—	—	0	0	—	—	—	2	8	90	85
New Hampshire	—	0	0	—	—	—	0	0	—	—	—	0	3	21	9
Rhode Island‡	—	0	4	14	8	—	0	1	3	—	—	0	5	14	7
Vermont‡	1	0	2	12	9	—	0	1	2	1	—	0	1	1	2
Mid. Atlantic	—	2	9	91	105	—	0	5	21	14	32	27	45	1,014	739
New Jersey	—	0	0	—	—	—	0	0	—	—	5	3	8	123	113
New York (Upstate)	—	1	5	32	33	—	0	4	7	7	4	3	14	92	95
New York City	—	0	0	—	—	—	0	0	—	—	21	16	35	626	351
Pennsylvania	—	1	6	59	72	—	0	2	14	7	2	5	10	173	180
E.N. Central	3	9	40	384	368	2	1	7	51	56	10	15	27	506	585
Illinois	—	0	4	13	19	—	0	1	2	5	2	7	15	233	290
Indiana	—	2	31	99	97	1	0	5	14	15	2	1	6	36	55
Michigan	—	0	1	2	15	—	0	1	1	2	—	2	8	76	76
Ohio	3	5	38	270	237	1	1	5	34	34	6	3	9	120	122
Wisconsin	N	0	0	N	N	—	0	0	—	—	—	1	4	41	42
W.N. Central	—	2	124	108	31	—	0	15	7	1	8	6	14	228	191
Iowa	—	0	0	—	—	—	0	0	—	—	—	0	3	10	13
Kansas	—	0	10	60	—	—	0	2	3	—	1	0	3	15	16
Minnesota	—	0	123	—	1	—	0	15	—	—	—	1	5	50	36
Missouri	—	1	5	40	29	—	0	1	—	1	7	3	12	148	115
Nebraska‡	—	0	1	2	—	—	0	0	—	—	—	0	2	2	4
North Dakota	—	0	0	—	—	—	0	0	—	—	—	0	0	—	1
South Dakota	—	0	3	6	1	—	0	1	4	—	—	0	2	3	6
S. Atlantic	17	21	59	717	819	2	4	15	144	123	48	46	180	1,498	1,365
Delaware	1	0	1	6	—	—	0	1	2	—	—	0	3	8	16
District of Columbia	—	0	2	5	19	—	0	0	—	2	—	2	12	111	75
Florida	7	11	29	417	435	1	2	8	83	79	26	15	25	533	485
Georgia	9	7	17	241	274	1	1	10	51	42	—	7	153	216	231
Maryland‡	—	0	1	1	—	—	0	0	—	—	9	6	15	204	202
North Carolina	—	0	0	—	—	—	0	0	—	—	7	5	23	219	199
South Carolina‡	—	0	0	—	—	—	0	0	—	—	3	1	10	65	47
Virginia‡	N	0	0	N	N	—	0	0	—	—	3	4	17	137	106
West Virginia	—	1	17	47	91	—	0	1	8	—	—	0	2	5	4
E.S. Central	1	3	9	107	142	1	0	3	23	25	12	16	29	530	440
Alabama‡	N	0	0	N	N	—	0	0	—	—	—	6	15	199	196
Kentucky	—	0	2	17	27	—	0	1	2	6	—	1	7	38	45
Mississippi	—	0	2	—	20	—	0	0	—	—	2	2	9	68	41
Tennessee‡	1	2	8	90	95	1	0	3	21	19	10	6	14	225	158
W.S. Central	—	1	10	92	63	—	0	3	15	6	27	32	55	1,097	958
Arkansas‡	—	0	1	1	9	—	0	0	—	2	4	1	8	74	46
Louisiana	—	1	4	47	54	—	0	2	6	4	5	7	29	262	160
Oklahoma	—	0	8	44	—	—	0	2	9	—	—	1	4	36	44
Texas‡	—	0	0	—	—	—	0	0	—	—	18	21	39	725	708
Mountain	—	1	5	41	74	—	0	3	14	31	—	7	19	211	336
Arizona	—	0	0	—	—	—	0	0	—	—	—	2	12	83	130
Colorado	—	0	0	—	—	—	0	0	—	—	—	1	5	22	50
Idaho‡	N	0	0	N	N	—	0	0	—	—	—	0	1	1	2
Montana‡	—	0	0	—	—	—	0	0	—	—	—	0	1	1	1
Nevada‡	—	0	3	16	16	—	0	2	5	1	—	2	6	67	97
New Mexico‡	—	0	0	—	—	—	0	0	—	—	—	1	7	31	45
Utah	—	0	5	15	29	—	0	3	8	21	—	0	2	5	11
Wyoming‡	—	0	2	10	29	—	0	1	1	9	—	0	1	1	—
Pacific	—	0	0	—	—	—	0	1	1	—	13	38	57	1,203	1,347
Alaska	—	0	0	—	—	—	0	0	—	—	—	0	1	4	6
California	N	0	0	N	N	—	0	0	—	—	1	36	54	1,096	1,186
Hawaii	—	0	0	—	—	—	0	1	1	—	—	0	1	5	14
Oregon‡	N	0	0	N	N	—	0	0	—	—	—	0	6	11	13
Washington	N	0	0	N	N	—	0	0	—	—	12	2	11	87	128
American Samoa	U	0	0	U	U	U	0	1	U	U	U	0	0	U	U
C.N.M.I.	U	—	—	U	U	U	—	—	U	U	U	—	—	U	U
Guam	U	0	0	N	N	—	0	0	—	—	—	0	1	3	—
Puerto Rico	N	0	0	N	N	—	0	0	—	—	2	3	11	97	90
U.S. Virgin Islands	U	0	0	U	U	U	0	0	U	U	U	0	0	U	U

C.N.M.I.: Commonwealth of Northern Mariana Islands.

U: Unavailable. —: No reported cases. N: Not notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.

* Incidence data for reporting years 2006 and 2007 are provisional.

† Includes cases of invasive pneumococcal disease caused by drug-resistant *S. pneumoniae* (DRSP) (NNDS event code 11720).

‡ Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending August 25, 2007, and August 26, 2006 (34th Week)*

Reporting area	Varicella (chickenpox)					West Nile virus disease [†]					Nonneuroinvasive [‡]				
	Current week	Previous 52 weeks		Cum 2007	Cum 2006	Current week	Previous 52 weeks		Cum 2007	Cum 2006	Current week	Previous 52 weeks		Cum 2007	Cum 2006
		Med	Max				Med	Max				Med	Max		
United States	148	795	2,813	24,940	31,664	1	1	178	224	1,026	5	2	344	517	1,993
New England	3	18	124	483	3,155	—	0	3	2	5	—	0	2	1	3
Connecticut	—	0	76	2	1,112	—	0	3	2	4	—	0	1	1	2
Maine [§]	—	0	7	—	171	—	0	0	—	—	—	0	0	—	—
Massachusetts	—	0	1	—	1,140	—	0	1	—	1	—	0	1	—	1
New Hampshire	2	8	17	215	241	—	0	0	—	—	—	0	0	—	—
Rhode Island [§]	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Vermont [§]	1	9	66	266	491	—	0	0	—	—	—	0	0	—	—
Mid. Atlantic	40	110	195	3,124	3,349	—	0	11	1	22	—	0	2	—	9
New Jersey	N	0	0	N	N	—	0	0	—	2	—	0	1	—	2
New York (Upstate)	N	0	0	N	N	—	0	5	—	7	—	0	1	—	3
New York City	—	0	0	—	—	—	0	4	—	7	—	0	1	—	3
Pennsylvania	40	110	195	3,124	3,349	—	0	2	1	6	—	0	0	—	1
E.N. Central	17	229	568	7,086	10,394	—	0	42	9	120	—	0	31	3	92
Illinois	—	2	11	105	97	—	0	24	8	69	—	0	13	3	54
Indiana	—	0	0	—	—	—	0	5	—	13	—	0	12	—	19
Michigan	—	97	258	2,869	3,088	—	0	10	—	14	—	0	4	—	5
Ohio	17	107	449	3,327	6,455	—	0	11	1	18	—	0	3	—	6
Wisconsin	—	19	80	785	754	—	0	2	—	6	—	0	2	—	8
W.N. Central	2	32	136	1,216	1,270	—	0	37	52	174	—	0	64	178	384
Iowa	N	0	0	N	N	—	0	3	1	14	—	0	2	4	13
Kansas	2	9	52	432	246	—	0	2	3	15	—	0	2	3	10
Minnesota	—	0	0	—	—	—	0	7	11	25	—	0	7	21	29
Missouri	—	16	78	640	953	—	0	14	2	41	—	0	2	3	5
Nebraska [§]	N	0	0	N	N	—	0	7	2	38	—	0	38	36	155
North Dakota	—	0	60	84	35	—	0	3	8	15	—	0	14	55	109
South Dakota	—	2	15	60	36	—	0	8	25	26	—	0	12	56	63
S. Atlantic	38	96	239	3,278	3,123	—	0	2	8	11	—	0	7	6	8
Delaware	—	1	6	24	45	—	0	0	—	—	—	0	0	—	—
District of Columbia	—	0	8	14	24	—	0	0	—	—	—	0	1	—	1
Florida	27	16	78	834	N	—	0	1	3	3	—	0	0	—	—
Georgia	N	0	0	N	N	—	0	2	4	2	—	0	4	5	4
Maryland [§]	N	0	0	N	N	—	0	2	—	5	—	0	1	1	1
North Carolina	—	0	0	—	—	—	0	1	—	—	—	0	0	—	—
South Carolina [§]	1	18	72	697	811	—	0	1	—	—	—	0	0	—	—
Virginia [§]	—	26	190	962	1,205	—	0	1	1	—	—	0	2	—	2
West Virginia	10	23	50	747	1,038	—	0	0	—	1	—	0	0	—	—
E.S. Central	3	3	571	340	27	—	0	15	20	82	—	0	17	21	66
Alabama [§]	3	3	571	338	26	—	0	2	6	6	—	0	1	2	—
Kentucky	N	0	0	N	N	—	0	2	1	1	—	0	1	—	—
Mississippi	—	0	2	2	1	—	0	10	13	64	—	0	16	19	63
Tennessee [§]	N	0	0	N	N	—	0	3	—	11	—	0	2	—	3
W.S. Central	41	181	1,640	7,531	8,448	—	0	24	22	282	—	0	26	14	147
Arkansas [§]	—	13	105	530	614	—	0	4	3	18	—	0	0	—	5
Louisiana	—	2	11	93	181	—	0	11	1	58	—	0	8	1	51
Oklahoma	—	0	0	—	—	—	0	5	7	20	—	0	5	6	10
Texas [§]	41	163	1,534	6,908	7,653	—	0	15	11	186	—	0	16	7	81
Mountain	4	56	131	1,857	1,898	—	0	39	54	272	—	1	176	200	1,083
Arizona	—	0	0	—	—	—	0	10	10	7	—	0	14	6	7
Colorado	—	22	62	707	998	—	0	10	10	42	—	0	51	62	205
Idaho [§]	N	0	0	N	N	—	0	10	1	126	—	0	93	23	676
Montana [§]	—	5	40	286	N	—	0	10	15	9	—	0	9	22	18
Nevada [§]	—	0	1	1	9	—	0	3	1	33	—	0	8	2	75
New Mexico [§]	1	6	37	294	307	—	0	4	8	1	—	0	2	6	2
Utah	3	15	73	551	551	—	0	7	3	41	—	0	15	3	72
Wyoming [§]	—	0	11	18	33	—	0	7	6	13	—	0	19	76	28
Pacific	—	0	9	25	—	1	0	15	56	58	5	0	27	94	201
Alaska	—	0	9	25	N	—	0	0	—	—	—	0	0	—	—
California	—	0	0	—	N	1	0	15	55	55	5	0	22	92	151
Hawaii	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Oregon [§]	N	0	0	N	N	—	0	1	1	3	—	0	6	2	48
Washington	N	0	0	N	N	—	0	0	—	—	—	0	1	—	2
American Samoa	U	0	0	U	U	U	0	0	U	U	U	0	0	U	U
C.N.M.I.	U	—	—	U	U	U	—	—	U	U	U	—	—	U	U
Guam	1	6	30	132	160	—	0	0	—	—	—	0	0	—	—
Puerto Rico	—	13	31	460	398	—	0	0	—	—	—	0	0	—	—
U.S. Virgin Islands	U	0	0	U	U	U	0	0	U	U	U	0	0	U	U

C.N.M.I.: Commonwealth of Northern Mariana Islands.

U: Unavailable. —: No reported cases. N: Not notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.

† Incidence data for reporting years 2006 and 2007 are provisional.

‡ Updated weekly from reports to the Division of Vector-Borne Infectious Diseases, National Center for Zoonotic, Vector-Borne, and Enteric Diseases (ArboNET Surveillance). Data for California serogroup, eastern equine, Powassan, St. Louis, and western equine diseases are available in Table I.

§ Not notifiable in all states. Data from states where the condition is not notifiable are excluded from this table, except in 2007 for the domestic arboviral diseases and influenza-associated pediatric mortality, and in 2003 for SARS-CoV. Reporting exceptions are available at <http://www.cdc.gov/epo/dphsi/phs/inflis.htm>.

¶ Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

TABLE III. Deaths in 122 U.S. cities,* week ending August 25, 2007 (34th Week)

All causes, by age (years)								All causes, by age (years)								
Reporting Area	All Ages	≥65	45-64	25-44	1-24	<1	P&I† Total	Reporting Area	All Ages	≥65	45-64	25-44	1-24	<1	P&I† Total	
New England	430	291	85	34	13	7	21	S. Atlantic	1,073	665	263	86	36	23	50	
Boston, MA	129	77	26	17	4	5	6	Atlanta, GA	109	64	30	11	3	1	4	
Bridgeport, CT	30	26	—	2	2	—	1	Baltimore, MD	161	87	48	21	4	1	8	
Cambridge, MA	11	10	1	—	—	—	3	Charlotte, NC	101	66	21	9	2	3	4	
Fall River, MA	24	15	6	2	1	—	3	Jacksonville, FL	135	97	26	6	4	2	7	
Hartford, CT	37	24	6	2	4	1	3	Miami, FL	95	61	18	6	7	3	4	
Lowell, MA	16	13	3	—	—	—	1	Norfolk, VA	46	31	7	6	2	—	—	
Lynn, MA	11	6	3	2	—	—	—	Richmond, VA	60	30	20	5	3	2	5	
New Bedford, MA	11	9	2	—	—	—	—	Savannah, GA	62	42	15	1	2	2	6	
New Haven, CT	23	15	6	2	—	—	1	St. Petersburg, FL	52	26	15	4	5	2	3	
Providence, RI	37	30	6	1	—	—	—	Tampa, FL	159	109	31	13	1	5	3	
Somerville, MA	1	1	—	—	—	—	—	Washington, D.C.	81	44	28	4	3	2	5	
Springfield, MA	30	21	6	2	1	—	—	Wilmington, DE	12	8	4	—	—	—	1	
Waterbury, CT	18	11	7	—	—	—	3	E.S. Central	839	511	213	68	19	28	58	
Worcester, MA	52	33	13	4	1	1	—	Birmingham, AL	207	120	50	16	8	13	15	
Mid. Atlantic	1,889	1,258	427	125	39	31	86	Chattanooga, TN	74	49	15	5	1	4	3	
Albany, NY	39	22	4	1	2	1	1	Knoxville, TN	104	68	24	8	1	3	9	
Allentown, PA	26	21	4	—	1	—	—	Lexington, KY	71	44	21	5	—	1	1	
Buffalo, NY	75	43	22	6	4	—	5	Memphis, TN	149	101	37	8	2	1	13	
Camden, NJ	33	24	4	1	3	1	—	Mobile, AL	62	34	13	10	5	—	3	
Elizabeth, NJ	8	4	3	—	1	—	—	Montgomery, AL	43	29	7	4	—	3	4	
Erie, PA	51	38	10	1	1	1	4	Nashville, TN	129	66	46	12	2	3	10	
Jersey City, NJ	13	8	4	1	—	—	—	W.S. Central	1,492	941	339	123	43	46	67	
New York City, NY	982	665	223	66	16	12	32	Austin, TX	96	58	26	8	4	—	6	
Newark, NJ	66	26	20	9	2	9	4	Baton Rouge, LA	21	13	4	2	1	1	—	
Paterson, NJ	15	6	4	3	1	1	2	Corpus Christi, TX	45	32	11	2	—	—	2	
Philadelphia, PA	173	110	41	15	3	4	10	Dallas, TX	206	117	51	21	9	8	6	
Pittsburgh, PA [‡]	37	27	8	2	—	—	2	El Paso, TX	88	54	26	6	1	1	2	
Reading, PA	32	23	7	2	—	—	4	Fort Worth, TX	116	84	24	3	—	5	1	
Rochester, NY	150	99	38	9	3	1	10	Houston, TX	407	255	98	38	7	9	31	
Schenectady, NY	20	18	2	—	—	—	2	Little Rock, AR	78	51	15	4	5	3	1	
Scranton, PA	25	20	2	3	—	—	—	New Orleans, LA [§]	U	U	U	U	U	U	U	
Syracuse, NY	83	57	21	3	1	1	6	San Antonio, TX	236	152	48	17	9	10	11	
Trenton, NJ	33	25	7	1	—	—	1	Shreveport, LA	58	37	13	5	—	3	4	
Utica, NY	14	12	1	1	—	—	—	Tulsa, OK	141	88	23	17	7	6	3	
Yonkers, NY	14	10	2	1	1	—	3	Mountain	1,081	690	242	94	33	22	58	
E.N. Central	1,854	1,235	402	126	55	35	112	Albuquerque, NM	119	85	19	10	1	4	10	
Akron, OH	43	29	11	2	1	—	—	Boise, ID	34	27	3	3	1	—	1	
Canton, OH	33	25	8	—	—	—	4	Colorado Springs, CO	72	43	20	4	5	—	2	
Chicago, IL	257	152	66	23	9	6	23	Denver, CO	82	53	18	5	2	4	8	
Cincinnati, OH	97	57	23	4	12	1	11	Las Vegas, NV	319	204	73	29	9	4	18	
Cleveland, OH	210	148	44	10	3	5	12	Ogden, UT	33	22	6	4	—	1	—	
Columbus, OH	185	130	35	16	1	3	11	Phoenix, AZ	202	107	63	18	11	3	5	
Dayton, OH	109	79	23	3	3	1	6	Pueblo, CO	26	20	5	1	—	—	1	
Detroit, MI	164	93	44	14	9	4	6	Salt Lake City, UT	102	65	18	12	3	4	9	
Evansville, IN	52	39	9	—	2	2	4	Tucson, AZ	92	64	17	8	1	2	4	
Fort Wayne, IN	71	51	11	8	—	1	3	Pacific	1,271	851	300	71	23	25	79	
Gary, IN	16	7	5	4	—	—	1	Berkeley, CA	12	8	2	2	—	—	1	
Grand Rapids, MI	56	34	9	7	3	3	2	Fresno, CA	73	48	17	6	1	—	2	
Indianapolis, IN	185	127	40	9	3	6	8	Glendale, CA	U	U	U	U	U	U	U	
Lansing, MI	37	27	7	2	1	—	2	Honolulu, HI	84	63	17	3	—	1	8	
Milwaukee, WI	84	56	18	7	2	1	5	Long Beach, CA	46	30	9	5	1	1	4	
Peoria, IL	37	26	8	1	1	1	1	Los Angeles, CA	U	U	U	U	U	U	U	
Rockford, IL	36	26	6	2	1	1	5	Pasadena, CA	27	18	7	1	1	—	4	
South Bend, IN	45	33	8	4	—	—	2	Portland, OR	126	84	31	5	3	3	7	
Toledo, OH	86	55	20	7	4	—	3	Sacramento, CA	167	111	42	9	2	3	10	
Youngstown, OH	51	41	7	3	—	—	3	San Diego, CA	153	95	41	10	2	5	8	
W.N. Central	578	358	147	43	17	13	41	San Francisco, CA	98	65	16	9	2	6	9	
Des Moines, IA	U	U	U	U	U	U	U	San Jose, CA	167	115	40	7	3	2	9	
Duluth, MN	30	22	8	—	—	—	2	Santa Cruz, CA	42	33	6	1	2	—	3	
Kansas City, KS	27	17	7	1	1	1	3	Seattle, WA	89	59	24	2	2	2	3	
Kansas City, MO	87	55	21	7	3	1	1	Spokane, WA	62	36	16	7	1	2	5	
Lincoln, NE	41	29	6	5	—	1	1	Tacoma, WA	125	86	32	4	3	—	6	
Minneapolis, MN	63	31	22	4	4	2	7	Total	10,507**	6,800	2,418	770	278	230	572	
Omaha, NE	97	70	18	6	—	3	11									
St. Louis, MO	77	36	26	10	5	—	1									
St. Paul, MN	48	33	8	5	—	2	5									
Wichita, KS	108	65	31	5	4	3	10									

U: Unavailable. —: No reported cases.

* Mortality data in this table are voluntarily reported from 122 cities in the United States, most of which have populations of ≥100,000. A death is reported by the place of its occurrence and by the week that the death certificate was filed. Fetal deaths are not included.

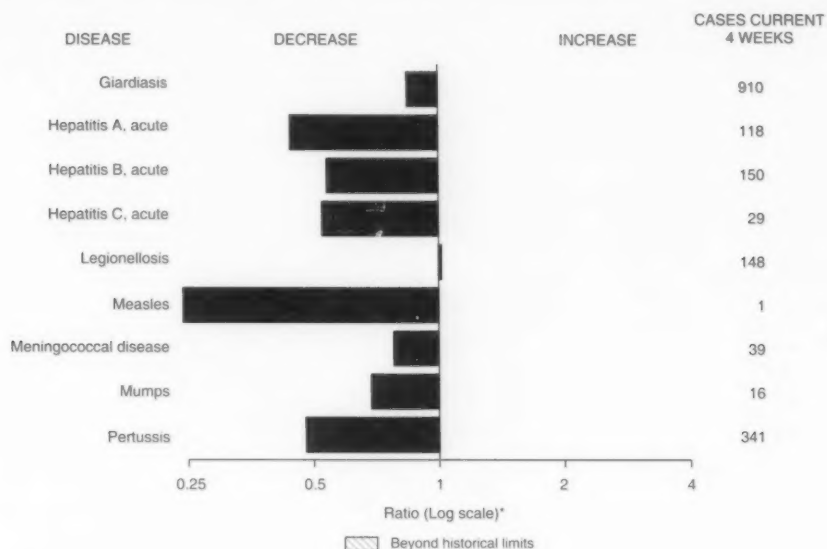
† Pneumonia and influenza.

‡ Because of changes in reporting methods in this Pennsylvania city, these numbers are partial counts for the current week. Complete counts will be available in 4 to 6 weeks.

§ Because of Hurricane Katrina, weekly reporting of deaths has been temporarily disrupted.

** Total includes unknown ages.

FIGURE I. Selected notifiable disease reports, United States, comparison of provisional 4-week totals August 25, 2007, with historical data



* Ratio of current 4-week total to mean of 15 4-week totals (from previous, comparable, and subsequent 4-week periods for the past 5 years). The point where the hatched area begins is based on the mean and two standard deviations of these 4-week totals.

Notifiable Disease Data Team and 122 Cities Mortality Data Team

Patsy A. Hall

Deborah A. Adams

Willie J. Anderson

Lenee Blanton

Rosaline Dhara

Carol Worsham

Pearl C. Sharp





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